

California **GARDEN**



MARCH-APRIL 1994 Volume 85 No. 2 \$1.50

KAY ROBINSON

HORTICULTURAL CALENDAR

Mar. 1-	★SAN DIEGO FLORAL ASSOCIATION Flower Arranging Classes
Mar. 29	Casa del Prado, Balboa Park. Series of 4 Tues. Classes. Mar. 1, 8, 22 & 29. Velma West, Instructor. 9:30-3 p.m. Members \$35; Non-Members & Affiliates \$40. Reservations and Information 232-5762.
Mar. 5-6	SAN DIEGO DAYTIME AFRICAN VIOLET SOCIETY 13th Annual Show
	Casa del Prado, Majorca Room, Balboa Park. Sat. 1-5 p.m.; Sun. 10-4 p.m. Free.
Mar. 12-13	SOUTH COAST BOTANIC GARDEN FOUNDATION African Violet Show & Sale
	26300 Crenshaw Blvd., Palos Verdes Peninsula. Sat. 11-4 p.m.; Sun. 9-3. 310/544-6815. \$3.
Mar. 12-13	DESCANSO GARDENS Flower Show - Daffodils
	1418 Descanso Dr., La Canada Flintridge. S. Calif. Daffodil Society. 9-4:30 p.m. 818/952-4401. \$5.
Mar. 15	★SAN DIEGO FLORAL ASSOCIATION Topiary Class
	Casa del Prado, Rm 104, Balboa Park. "Parrot in a Swing." 9:30-2:30 p.m. One day limited class. Materials Furnished. \$30 Members, \$35 Non-member. Reservations & Information call 298-5182.
Mar. 18	★SAN DIEGO FLORAL ASSOCIATION Bus Trip-Sherman Gardens & Chelsea America Flower Show
	Fountain Valley, \$43 Members, \$46 Non-members. See coupon page 55.
Mar. 18-20	SAN DIEGO COUNTY ORCHID SOCIETY 48th Spring Show
	Scottish Rite Center, Mission Valley. Fri. preview, 6-10 p.m.; Sat. 9-6 p.m.; Sun. 9-4 p.m. \$4.
Mar. 18-21	CHELSEA AMERICA FLOWER SHOW® OF SOUTHERN CALIFORNIA Twenty Acres of Exhibits
	Mile Square Regional Park, Fountain Valley, Orange Co., 8-5 p.m. 310/546-9435. \$10/Gate.Pk.Fee.
Mar. 19	AMERICAN BAMBOO SOCIETY Southern California Society Plant Sale
	Quail Gardens, 230 Quail Garden Dr., Encinitas. 10-1 p.m. Call 454-0334. Free. \$1 Parking.
Mar. 19-20	IKEBANA INTERNATIONAL, CHAPTER 119 26th Anniversary Exhibit
	Casa del Prado, Majorca Room, Balboa Park. Sat. & Sun. 11-4:30 p.m. Free.
Mar. 23-26	ART ALIVE - 14th Annual - Art and Floral Designs
	San Diego Art Museum, Balboa Park. Floral Designs. Lectures. 10-4 p.m. Call 232-7931.
Mar. 26	SANTA BARBARA BOTANIC GARDEN Wildflower Day & Spring Plant and Book Sale
	1212 Mission Canyon Road, Santa Barbara. Sat. 9-3 p.m. Call 805/682-4726. \$3.
Mar. 26-27	BALBOA PARK AFRICAN VIOLET CLUB 19th Annual Show
	Casa del Prado, Majorca Room, Balboa Park. Sat. 12-5 p.m.; Sun. 10-4 p.m. Free.
Mar. 26-27	THE HUNTINGTON Bonsai Show
	1151 Oxford Road, San Marino. Sat. & Sun. 10:30-4:30 p.m. 818/405-2141. \$5 Donation.
Apr. 2-3	EXOTIC PLANT SOCIETY 16th Annual Show
	Casa del Prado, Majorca Room, Balboa Park. Sat. & Sun. 11-4:30 p.m. Free.
Apr. 6-	SWEETWATER ADULT SCHOOL Landscaping, Six Week Course
May 11	Bonita Vista Middle School, 650 Otay Lakes Rd., Rm 801, Bonita. 6-9 p.m. Call 468-3286. \$10 Fee.
Apr. 8-9	DESCANSO GARDENS Spring Plant Sale
	1418 Descanso Dr., La Canada Flintridge. Descanso Garden Guild. 9-4 p.m. 818/952-4401. No Fee.
Apr. 9-10	CORONADO FLORAL ASSOCIATION 69th Spring Flower Show
	Spreckels Park, Coronado. Sat. 1-5 p.m.; Sun. 10-4 p.m. Call 435-3849. \$2 Admission.
Apr. 9-10	SOUTH COAST BOTANIC GARDEN FOUNDATION Cactus Show and Sale
	26300 Crenshaw Blvd., Palos Verdes Peninsula. 9-4 p.m. Call 310/544-1948. \$5 Admission.
Apr. 12	★SAN DIEGO FLORAL ASSOCIATION Basket Class
	Casa del Prado, Rm. 104, Balboa Park. Grapevine Basket. M. Rosenburg, Instructor. Materials furnished. 9:30-2:30 p.m. \$25 Members, \$30 Non-members. Reservations/Information 298-5182.
Apr. 14	LAKE HODGES NATIVE PLANT CLUB Spring Garden Tour
	Tour Private Gardens. No. Poway-Rancho Bernardo & Escondido. 10-3 p.m. \$6. Call 487-2629.
Apr. 16-17	FALLBROOK GARDEN CLUB 63rd Flower Show
	Fallbrook Community Center, 341 Heald Ln. Sat. 2-6 p.m.; Sun. 10-4 p.m. 723-7164. Free.

(Continued on page 36)



Published by
San Diego Floral Association
for 84 Years

PUBLICATION STAFF

EDITOR

Jacqueline Coleman

ASSISTANT EDITOR

Barbara S. Jones

CALENDAR EDITOR

Jean E. Johns

NOW IS THE TIME EDITOR

AFFILIATE LISTING EDITOR

Lynn Beyerle

BOOK & VIDEO REVIEW EDITOR

Rosalene Cox

TOURS EDITOR

Helen Gagliardi

PROFILES EDITOR

Susan Fox

ADVERTISING

Jacqueline Coleman

RENEWALS

Joan Roman

MAILING

Lynn Beyerle

EDITORIAL ADVISORY BOARD

Vincent Lazaneo

Betty Newton

Tineke Wilders

Manuscripts are invited. Deadline is 90-days prior to publication date. *California Garden* reserves the right to edit any and all submitted material. All manuscripts and illustrations will be handled carefully, but we cannot assume responsibility for their safety. Submissions must be double spaced and/or in WordPerfect on a computer disk. Enclose self addressed post paid envelope if you expect them to be returned to you. *Hortus Third* is the authority for all botanical names used in the magazine. All opinions expressed are those of the authors and do not necessarily reflect the views of the editors of *California Garden*. No endorsement of named products is intended, nor is criticism implied of similar products which are not mentioned.

Send all editorial material and change of address to:

California Garden

San Diego Floral Association
Casa del Prado, Room 105, Balboa Park
San Diego CA 92101-1619

California SINCE 1909 **GARDEN**

LIBRARY OF CONGRESS NO. ISSN 0008-1116

San Diego Floral Association
Casa del Prado, Balboa Park
San Diego CA 92101-1619
Monday through Friday
10 a.m. to 12 and 1 to 3 p.m.
619/232-5762

VOLUME 85

NUMBER 2

MARCH-APRIL 1994

FEATURES

- | | | |
|----|---|---------------------|
| 37 | <i>Odontoglossum</i> Orchids | Forrest Robinson |
| 39 | <i>Epidendrum</i> Orchids | Ardell O. Marlin |
| 41 | Herbs | Robert Horwitz |
| 42 | The Orchid Iris | Catherine L. Zinsky |
| 43 | Gardening in the San Diego County Interior . | Cynthia Carlson |
| 45 | Lotusland - A Private Paradise Goes Public . | Gloria Glasser |
| 46 | Studying in the Rain Forest | Michael Raffaeli |
| 47 | Riverside Demonstration Garden | Betty Newton |
| 51 | The Genus <i>Watsonia</i> | Jim Duggan |
| 54 | Wildflowers and Wildlife Abound at Blue Sky Reserve | Ethan Rotman |
| 59 | <i>Nuphar Polysepalum</i> and "Baby Lettuce" | Staff |

DEPARTMENTS

- | | | |
|----|---|-----------------|
| 34 | Horticultural Calendar | Jean E. Johns |
| 48 | Now is the Time | Staff |
| 52 | Book Reviews | Staff |
| 55 | Bus Tours | Helen Gagliardi |
| 56 | Affiliates | Lynn Beyerle |
| 58 | North County Gardens Bus Tour | Helen Gagliardi |

The cover art is by Kay Robinson, who has a graduate degree in the teaching of art from USC and has taught art in public schools in several cities.

Orchid photographs by Suzan Fertig.

Single copies of the current issue of *California Garden* magazine can be purchased for a donation of \$1.50 at the locations listed.

CALIFORNIA ARBORETUM FOUNDATION, INC., 447-8207, 301 North Baldwin Ave., Arcadia CA 91006
MISSION HILLS NURSERY, 295-2808, 1525 Fort Stockton Drive, San Diego CA 92103
753-7177, 442 North Rancho Santa Fe, Encinitas CA 92024
OUCII NURSERY, 263-6114, 5003 Imperial Ave., San Diego CA 92113
QUAIL BOTANICAL GARDEN FOUNDATION, INC., 436-3036, 230 Quail Garden Drive, Encinitas CA 92023
SAN DIEGO FLORAL ASSOCIATION, 232-5762, Casa del Prado, Rm. 105, Balboa Park, San Diego CA 92101
WALTER ANDERSEN NURSERY, 224-8271, 3642 Enterprise St., San Diego CA 92110

FLOWER SHOWS: Show chairman contact *California Garden*, 232-5762 if you want the magazine sold at your show.

CALIFORNIA GARDEN (ISSN 0008-1116) is published Bi-Monthly for donations of \$7.00 per year or \$13.00 for two years, foreign delivery add \$6.00 per year, by San Diego Floral Association, Casa del Prado, Balboa Park, San Diego CA 92101-1619. © San Diego Floral Association, 1992. All rights reserved. Second Class Postage paid at San Diego CA. POSTMASTER: Send address changes to CALIFORNIA GARDEN, Casa del Prado, Balboa Park, San Diego CA 92101-1619.

Apr. 16-17	PALOMAR ORCHID SOCIETY Annual Spring Orchid Show Mira Costa College, Student Center, Oceanside. Sat. 12-6 p.m.; Sun. 10-5 p.m. Call 941-0382.
Apr. 16-17	SAN DIEGO/IMPERIAL COUNTIES IRIS SOCIETY 29th Show Casa del Prado, Majorca Room, Balboa Park. Sat. 1-5 p.m.; Sun. 11-4:00 p.m. Call 463-7600 Free.
Apr. 16-17	RANCHO SANTA FE GARDEN CLUB Annual Flower Show and Plant Sale La Granada & Avenida Acacias. Sat. & Sun. 10-5 p.m. Call 759-2770. Free.
Apr. 16-17	ENCINITAS CHAMBER OF COMMERCE Spring Flower Tour Tour will visit growers in Encinitas. For Reservations & Information 619/753-6041.
Apr. 19	★SAN DIEGO FLORAL ASSOCIATION Quarterly Meeting and Program Casa del Prado, Balboa Park. "Epidendrum Orchids, Their Culture and Habitat." Speaker, Ardell Marlin. \$5 Members; \$6 Non-Members. Information & Reservations 232-5762.
Apr. 19	★SAN DIEGO FLORAL ASSOCIATION Basket Class, Appalachian style. See Apr. 12th Information.
Apr. 22	EARTH DAY 24th Annual Observance. Balboa Park. Call 272-7370.
Apr. 23	★SAN DIEGO FLORAL ASSOCIATION Tour Temeclular Rose Garden and Judy's Perennials. \$39 Members; \$42 Non-members. See page 55.
Apr. 23-24	DOS VALLES GARDEN CLUB 13th Standard Flower Show 28751 Cole Grade Rd., Valley Center Middle School. Sat. 1:30-5:30 p.m.; Sun. 12-4 p.m. 749-3485.
Apr. 23-24	SAN DIEGO BONSAI CLUB 29th Show Casa del Prado, Majorca Room, Balboa Park. Sat. & Sun. 11-5 p.m. Free.
Apr. 23-24	TEMECULA VALLEY ROSE SOCIETY 4th Annual Rose Garden Fete 42495 Calle Capistrano, Temecula. Sat. & Sun. 12:30-4:30 p.m. Call 909/699-4530. \$8 Admission.
Apr. 23-24	FULLERTON ARBORETUM Annual Plant Sale C.S.U. at Fullerton Campus. Yorba Linda Blvd. 10-4 p.m. Call 714/773-3579. Free. \$1.50 Parking.
Apr. 24	SOUTH COAST BOTANIC GARDEN FOUNDATION Epiphyllum Show & Sale 26300 Crenshaw Blvd., Palos Verdes Peninsula. 9-4 p.m. Call 310/544-1948. \$5 Admission.
Apr. 26	★SAN DIEGO FLORAL ASSOCIATION Basket Class, 3 Ring Palm. See Apr. 12th Information.
Apr. 30- May 1	HEARTLAND AFRICAN VIOLET SOCIETY 13th Show Casa del Prado, Majorca Room, Balboa Park. Sat. 1-5 p.m.; Sun. 11-5 p.m. Free.
Apr. 30- May 1	SOUTH COAST BOTANIC FOUNDATION Rose Show & Sale 26300 Crenshaw Blvd., Palos Verdes Peninsula. Sat. 11-5; Sun. 11-4. 310/544-1948. \$5 Admission.
Jun. 13-20	CONTINUING EDUCATION - RANCHO BERNARDO Garden Safari A Tour of Gardens in Seattle, Victoria & Vancouver. Reservations by April 29th. Call 478-0464.
Every Wednesday	LOS ANGELES STATE & COUNTY ARBORETUM Free Guided Tours 301 N. Baldwin Ave., Arcadia. Guided Walking Tours of Gardens. 11 a.m. Call 818/821-3250.
Every Saturday	OFFSHOOT TOURS One-Hour Plant Walks in Balboa Park Meet in front of Botanical Lath House. Canceled for rain or less than 4 attendees. 1st Sat. History Walk; 2nd Sat. Palm Walk; 3rd Sat. Tree Walk; 4th Sat. Desert Walk; 5th Sat. Sample of all four tours. 10 a.m. Free. No reservations.
Weekends 1994	SAN DIEGO NATURAL HISTORY MUSEUM Canyoneers Outdoor Program Free guided nature walks. Information and brochure: 232-3821 Ext. 203.
Weekly	SANTA BARBARA BOTANIC GARDENS Spring Events For lectures, tours and spring garden schedule call 805/682-4726.
Weekly	QUAIL BOTANICAL GARDENS FOUNDATION, INC. Spring Classes and Events 230 Quail Gardens Dr. Encinitas. Call for Schedules. 619/436-3036.
Weekly	SAN DIEGO JAPANESE FRIENDSHIP GARDEN Docent Tours Balboa Park by Organ Pavilion. Tues., Sat. & Sun.: 10-4 p.m. Donation. Free Tues. 232-2780.

Deadline for submission to **HORTICULTURAL CALENDAR** for May/Jun. issue is Mar. 15.

SAN DIEGO FLORAL ASSOCIATION is not responsible for changes in information which has been submitted by the organizations.

[*Erratum:* the January/February 1994 issue, page 5, top of second column in "Color Control in the Garden" should read, "speak in terms of "hot" and "cold" colors. Yellow, orange, apricot/salmon and many shades of red are hot colors. Purples, blues, pure greens and most shades of pink are cool colors. White is neutral."] The editor offers apologies to Mr. Liljeblad and readers.

ODONTOGLOSSUM ORCHIDS

by FORREST ROBINSON

(Editor's note: We are fortunate in many areas of Southern California that *Odontoglossum* may be grown successfully outdoors. The "Mexican" species and intergeneric hybrids are most suitable. Do not hesitate to consult the San Diego County Orchid Society, or your local orchid society or growers, for further advice pertinent to your garden location.)

ODONTOGLOSSUM HAS BEEN REFERRED to as "the most beautiful of all the orchid genera." Their classical beauty prompted many early growers to try to grow "odons" even though they were called the most difficult of all orchids to grow at that time. Orchidists, especially in nineteenth century England, found it difficult to reconcile themselves to the fact that *Odontoglossum* would not grow unless they were provided the type of environment in which they grow in nature.

Early plant hunters collected *Odontoglossum* in South America at altitudes of 5,000-10,000 feet. These plants were mostly found in Venezuela, Colombia, Ecuador and Peru. They grow along clearings in the cool, wet, rain forests of the Andes Mountains. Collected plants were shipped to hobbyists in

Europe, mostly to England. They tried to grow them under warm tropical conditions in hot, humid glasshouses. Consequently most of the early collections of *Odontoglossum* were destroyed. Fortunately, toward the end of the nineteenth century they discovered their cultural problems and began growing and hybridizing odons very successfully.

There are two definite groups of *Odontoglossum* species. One group is the "Colombian," or South American, *Odontoglossum* mentioned above. The other is the "Mexican" group of species, which are found at altitudes of 5,000-9,000 feet, growing in the high tropical

rain forests of Panama, Costa Rica, Honduras, El Salvador, Guatemala and the great plateau of Southern Mexico. This classification is convenient and practical since the cultural requirements of the two groups are quite different.

The Colombians grow and flower in a moist, cool, temperate climate throughout the year, whereas the Mexicans undergo two definite seasons. They have a cool, dry and bright winter season during which they rest. Very little plant growth occurs at this time. They grow and flower during the warm, moist and overcast summer season. Therefore, greenhouse requirements for these two groups are quite different.

The Colombian group likes night temperature near 52° F and a daytime temperature about 74° F. They don't object to night temperatures in the mid to high forties, but they will definitely decline if day temperatures reach into the nineties for any length of time.

They like good water, less than one hundred parts per million of undesirable salts. If necessary use rain water, reverse osmosis or deionized

water. Since they grow, in nature, in areas of constant rain, fog or clouds, they need to be kept moist—but not soggy—at all times. We try to accomplish this in our greenhouses through watering schedules and plant growing media.

This group grows best under very humid conditions, ranging from 60-70% relative humidity, along with good air circulation.

Their light requirement is about 1500 foot candles throughout the year.

As you can see, it is difficult to grow these Colombian odons with our *Cattleya*, *Phalaenopsis*, et cetera in our



Odontioda

"intermediate" type of greenhouse. An intermediate house is kept at a temperature between 60-85° F with relative humidity adjusted to approximately 56%. The average light is 2500 foot candles with an adjustment made for various genera. A "cool" greenhouse is recommended to provide the Colombians their proper growth requirements. However, many hobbyists are able to grow and flower these Colombians by placing them outside under shade cloth in the winter and in a cool area of their intermediate greenhouse in the summer, keeping them as cool as possible with sprays, mists and good air circulation.

The growth requirements of the Mexican odonts are quite different. They like a night temperature of about 57° F and daytime temperature about 75° F in winter months. During the spring and summer, their growth and flowering period, they do best with the night temperature about 62° F and day temperatures of 85-90° F.

They should be given just enough water in the winter during their rest period to keep them alive. However, in the late spring and summer their growing medium should be moist, but not soggy wet.

As you can see, these plants grow well in our intermediate type of greenhouse. Many Mexican species are outside, under shade cloth. In fact, some of these plants prefer to be grown outside, especially in San Diego.

In water retention properties, the type of growing media used with Colombian odonts differs from that required for Mexican species. As mentioned above, the Colombians prefer to have their roots moist always, whereas the Mexican species like little moisture in winter.

Few growers agree on the growing mix odonts need. However, for the Colombians the following formula seems to be basic:

- 5 parts 1/8-1/4 inch fir bark for water retention
- 2 parts #3 perlite for aeration
- 1 part #1 charcoal for aeration
- 1 part sphagnum moss for retention of water.

Moss may be eliminated from mix, but you must water your plants more often. Plastic pots are generally used with the above mix.

There are some growers using 50% perlite and 50% moss. A few are using rock wool and perlite. With so much water retention present with moss or rock wool, the porous clay or pulp pots should be used with them for better evaporation.

The Mexican group of *Odontoglossum* grows well with the above formula but eliminate from the mix the moss that is used for water retention.

Most growers feed a balanced fertilizer such as 7-7-7 or 20-20-20. It is recommended that about one-quarter of the manufacturer's suggested dosage be used to feed them every time you water your plants. During the rest period the Mexican odonts need very little fertilizer.

When we think of *Odontoglossum* we visualize a beautiful plant with flowers that exhibit vivid color and various patterns, and are round or star-shaped on long arching sprays. This is the image of the Colombian group. However, due to the Colombian need for cool moist conditions throughout the year, they have been considered difficult to grow. Therefore, they have been hybridized with the warmer growing Mexican group of plants. The resulting hybrids are more warmth tolerant and display a variation in color and pattern.

Because of the exacting requirement as regards to greenhouse environment, the Colombian odonts have been hybridized with other more tolerant genera. A wide range of intergeneric hybrids has been created using such genera as *Cochlioda*, *Oncidium*, *Miltonia*, *Brassia*, *Aspasia* and others.

The genus that has been most frequently used in hybridizing is *Cochlioda*. *Cochlioda noezliana* is a native of South America. It has the same environmental growing conditions as the *Odontoglossum*, produces beautiful, round, dark-red flowers and seems to be more temperature tolerant than the odonts. The *Odontoglossum-Cochlioda* hybridization results in beautiful varied-colored flowers. They are called *Odontioda*.

The other commonly used genera for *Odontoglossum* hybridization produce beautiful *Odontonias*, *Odontobrassias*, etc. These hybrids have been hybridized together to produce a spread in the flowering season and introduce different colored forms to the *Odontoglossum* hybrid. Also, these hybrids seem to be able to tolerate both cool and warm conditions, growing well in the intermediate type of greenhouse, or outside under partial shade. However, if they are grown outside, they should be protected in the winter during periods of frost, and in the summer if they are subjected to temperatures of 90° F or more.

Growing the "pure blood" Colombian *Odontoglossum* may be a challenge, but we all should have some of the beautiful intergenerics in our collections. I believe they are the most lovely and handsome of all orchids. □

FORREST ROBINSON, a retired dentist, received his BA degree in botany from UCLA. As a hobbyist he grows many of the more popular orchid genera. During his travels to Mexico, Central and South America he observed the natural conditions required by many orchid genera for their proper growth and development.

R. Barry Lewis
Computer Systems Analyst
Custom Programming, Installations,
Training and Consulting
(619) 540-4139

EPIDENDRUM ORCHIDS

by ARDELL O. MARLIN

ORCHIDS ARE VERY SPECIAL and unique. So very special because they adapt to every environmental habitat in the world, except Antarctica. We must remember that the orchid family has the greatest biological diversification of any group of plants under study. The colors, shapes and fragrances evolve in a great array. Also, there is much variance in size. There are blossoms the size of a pinhead, and many blooms will measure up to 12 to 15 cm. We now have identified more than thirty thousand different species of orchids that grow successfully in high mountain terrains, steamy tropical jungles, snow covered areas throughout the U.S. and in the desert wastelands of the world. Within this group of more than thirty thousand biologically different specimens, more than three hundred have been collected and identified as *Epidendrum* orchids. We have more than seventy-five in our collection. There is great concern for all orchids because they are faced with extinction due to the rapid development that is going on in our ecosystem today. Therefore we propagate and preserve these beautiful flowers the best that we can.

Most orchid plants are easily propagated. They are pollinated by different insects while they are growing in their native habitat. Man also pollinates the flowers, and then he germinates the seed in sterile conditions. When we propagate from seed, these plants will reach blooming size in about three years. Then, if given proper care, it seems as if they will live forever. Orchid societies have on record plants dating from 1888, still growing and

blooming. I have several *Epidendrum* orchid plants that have been in a continual bloom for twenty years. An *Epidendrum* plant will reach maturity after two to three years from its first bloom as a seedling.

Many *Epidendrums* bloom every day of the year in Southern California. We live in *Sunset Coastal Zone 24*. Blooms last for a very long time. On the plant a "head of flowers" will remain in continual bloom for several months. As a cut flower it has a vase life of more than ten days. There are some that have a seasonal flowering, meaning that they will produce their inflorescence (the flowering part of the plant) only at certain times of the year.

Epidendrums are either epiphytic or terrestrial in their manner of growth. Many will cling to a tree branch or rock. We grow plants in carved out lava rock and they love it. When you grow them in pots they must be in a mix that has very good drainage. If you plant them in a raised bed, the growing

media must be very porous. ORCHIDS DO NOT LIKE TO HAVE THEIR FEET WET.

At one time orchids were very expensive. This is not so anymore. Due to modern laboratory technology and the modern growing methods, prices have come down within the reach of everyone. Therefore, small plants will cost a few dollars, and in three to four years, with care, a lovely specimen plant will be blooming.

Anyone can grow orchids. All orchids require water, light and fertilizer and moving air. Add to this a little



Epidendrum pseudoepidendrum

TLC and you will produce many fine inflorescences. Epidendrums can be grown well outside in Zone 24. You also may grow them outside in Zones 20, 21, 22 and 23. You may have to give them some protection against the winter cold and the direct rays of the hot sun. We have experienced a frost in Encinitas, though not of long standing. Some flower heads were frosted, but no plants died. Some leaves became spotted with black dots; we think due to the cold. The leaves contain much moisture.

Epidendrums require high light intensity. Sunlight is very important for proper growth and flowering. The plants will tolerate early morning sun and late afternoon sun. Still, if you live in an area with a hot noonday sun (10:00 a.m. to 3:00 p.m.), the plants will require partial shade.

Water your orchids once a week, or as necessary. Do not keep them WET. Feed the plants after you have watered them. Feed the plants with any well-balanced plant food that contains trace elements. There are many commercial brands available in the local nurseries. We do not feed with the same thing every time. I feel they might like to have their diet varied. We feed once every three weeks, and we use a weaker strength than what is recommended by the company. Be sure to read the directions.

Epidendrums are not prone to many problems with disease and garden pests. They do get aphids, and sometimes mites, and a certain type of scale. Snails and slugs will have a meal on them now and then. If you get them too wet they will get root rot. Again I might mention, "Do not overwater." Your plants should have those nice, big white roots.

We grow all our *Epidendrums* in pots. I find it easier to keep the plants well-groomed. We also move them regularly to different areas of the yard. I have some plants that have been in large tubs for five to eight years. They continue to produce good healthy inflorescences. We repot the smaller plants and move them up to larger pots as they become rootbound. Most of our plants are started in 4" pots. We start by dividing the mother plant or by taking off keikis. Keikis are the offshoots or offsets from a plant. A keiki will produce the same flower as the mother plant.

We make our own potting medium. This is the mixture that works well for us. We use equal parts of #3 mesquite charcoal chips, #3 perlite or horticultural sponge rock, orchid seedling bark, small lava rock, and to this we add 2 parts of Sunshine Mix™ #1, and 2 parts of a good planting mix that drains well. We mix the ingredients well. When we plant divisions or keikis we dampen the potting soil. We water and settle the plant, and then we do not water for a week. After the plants become firm in the pot and begin to show signs of growth, we continue with a regular watering and feeding routine.

In the winter months, we hold back the water, as the plants are not growing as rapidly. If it rains this is fine, as they love the rainwater.

Many *Epidendrum* species are fragrant. There are epidendrums that are not cold weather tolerant. If they have been collected from a tropical environment, they must be grown in warmer conditions. They use *Epidendrums* in breeding new lines. When you use pollen from a cool-growing *Epidendrum* and cross it with a warm-growing *Cattleya* you have produced an "epicat", and the orchid will grow in a cooler environment. This type of breeding also will extend the blooming period.

In closing I would recommend joining our local San Diego County Orchid Society. We meet in Balboa Park. There is another excellent group, The Palomar Orchid Society, that meets in Vista. □

ARDELL O. MARLIN was born and raised on a homestead in South Dakota, but has lived in San Diego since 1943. She has BS and RN degrees, but says that she is not a botanist or a taxonomist; she just likes to grow orchids.

HERBS (continued)

MINT

Mint makes one think of summer and mint juleps, or cold drinks. It is also used to flavor chewing gum and candy. If you plant it in your garden, keep it in a confined area, as it will take over. The scent of crushed mint leaves is a delight. I use it often in cooking carrots as its fresh flavor adds a lot to the blandness of carrots.

OREGANO

This is my absolutely favorite herb. It is of the mint family. Because it is so essential to Greek and Italian dishes, one thinks of it as a Mediterranean herb, and it is. Can you imagine a pizza or a dish of spaghetti without the appetizing taste and smell of oregano?

BAY LEAVES

There are two types of these leaves, one is the imported leaf from Europe (*Laurus nobilis*). The other is the locally grown California bay tree (*Umbellularia californica*), a medium sized tree with shiny oval shaped leaves. I have one growing in my garden and it is a pleasure to go out and pull a few leaves off for seasoning.

MUSTARD SEED

In the spring, along the central California coast, the hills are covered with the yellow flowers of the wild mustard plant. The garden variety is about the same, except that it has been tamed for home consumption. The seeds are used for pickling and, of course, they are ground into a powder for the ubiquitous mustard one spreads all over hot dogs and the like. □

ROBERT HOROWITZ is a retired aerospace engineer. He is an avid grower and frequent contributor to CALIFORNIA MAGAZINE and other publications.

HERBS

by ROBERT HORWITZ

GROWING HERBS IS FUN because you can experiment with where you grow them. There are family herb gardens that take up the whole garden space and there are window sill gardens with a few favorite herbs growing in old coffee tins. The culture is the same for most of the herbs that we use commonly in our cooking. Like all good gardens, the soil should be rich in humus and nutrients, have good drainage and be friable. (That means crumbly, not sticky.) Herbs will grow all year around here in San Diego, not all the same variety, but some herbs will be in season at some time of the year. Here is a list of my favorite herbs with their characteristics. This is not an inclusive list by any means. There are some spices stuck in here that are probably not strictly herbs, but they taste good, so they are mentioned.

ALLIUM

This family includes garlic, chives, shallots and leeks. It is the bulb of the garlic plant we use most for flavoring, but there is nothing wrong with using some leaves, too. There are garlic chives that have a combination flavor of both chives and garlic. Chives alone have a sweet "oniony" taste. Often little pieces snipped off the leaves are used. The shallot is the most delicate and expensive of this group and has the greatest snob appeal. Many cooks use it where onion would do as well because it supposedly is part of what is called "haute cuisine."

CHERVIL

This is an annual herb with a sweetish anise/parsley taste to it. It is the leaves that are used. If it starts to bloom, cut off the blossom head to stimulate branching and further leaf growth.

HORSERADISH

Can a root be a herb? This herb is grown for the flavor derived from its root. It is a very pungent smelling and tasting herb and a little will go a long way. It is processed by grating the root and keeping it in vinegar. It will last for months this way in the refrigerator. What would a shrimp cocktail be without horseradish mixed with ketchup as a sauce?

TARRAGON

This herb is a French favorite. It has a pervasive, slightly licorice flavor that goes wonderfully well with chicken, fish and salads. The leaves are long and narrow and dry easily, maintaining their flavor for a long time. A little goes a long way as a flavoring.

BASIL

This is one of the most popular herbs. It is used either fresh or dried. The dried type is more pungent than fresh because the flavor oils have not evaporated. Tomatoes and

basil were created to go together. Used in pesto, basil makes a pasta dish like a creation from heaven. It is an annual plant, needing to be planted from seed each spring. When its little white blossoms appear, pinch them off and use them. The pinching will encourage branching of more leaves.

PARSLEY

Everybody knows what parsley is. It is a herb that is either liked or disliked. An uncle of mine once said that cooks think they are making a gourmet dish if they garnish the entree with parsley and a twisted slice of orange. Its slightly bitter taste and its deep green color add a fillip of class to a dish, regardless of what Uncle said. It is easy to grow and will provide sprigs to be picked for use almost from the first day it peeks out of the ground.

CORIANDER

Some call this Chinese parsley. It may look a little like parsley when it is young, but its taste is very different, having almost a metallic quality to it. It is indispensable in Mexican and Chinese cooking. When it gets ripe, and produces seeds, these seeds are the coriander seeds used so often in relishes and pickles. Fresh coriander or cilantro does not freeze at all. It must be used fresh, but will last a week in the refrigerator if the stems are placed in a jar of water.

CARAWAY

The seeds of this herb are used. Rye bread would not be its best without caraway seeds in it. It complements dill and was made for cucumbers. Its only problem is that occasionally one or two will get stuck in your teeth.

DILL

This is also one of my favorite herbs. It has a fresh quality that is superb. Of course, what would pickles be without dill? It goes with fresh beans, in salads, with black eyed peas and cauliflower. The leaves are thin and long and are quite delicate.

THYME

Fish and thyme go together. It also flavors sausage meat along with pepper, sage and ginger. Thyme is closely allied with basil in its tastes and uses, but it is much more powerful than basil and you do not need as much for flavoring.

GINGER

Is this an herb? For all intents and purposes it is. It is the root of the ginger plant that is used, and the Chinese could not cook without it. It is pungent when fresh. It can be frozen, but loses its sharp edge. Dried powdered ginger is hard to use as it really does not taste like fresh ginger.

(continued on page 40)

THE ORCHID IRIS

by CATHERINE L. ZINSKY

FOR THE LOOK OF an orchid flower from a reliable bloomer with low requirements, consider *Iris japonica* 'Nana', more commonly — and aptly — referred to as the orchid iris.

Iris japonica is a crested iris. Most gardeners are familiar with the bearded iris, which are distinguished by a tuft of hairs (the "beard") on the falls. (The falls are those petals on the outer whorl of the flower that usually droop downward.) Crested iris, on the other hand, are characterized by having what is more like a narrow serrated rib, the crest, at the base of its falls.

The crested iris constitute a small group compared to the bearded iris. As the species name of *Iris japonica* suggests, it is a native of Japan. Most crested iris, however, are native to North America and eastern mainland Asia.

True to the genus, *japonica* are rhizomatous. Most gardeners and non-gardeners alike consider rhizomatous plants as bulbs, a general category that loosely includes any plant that grows from some sort of thickened underground stem. Botanists would disagree, probably with a shudder. Suffice to say that *I. japonica* develops from a rhizome, not a true bulb, though research on the genus would almost certainly lead you to a book on bulbs.

The strap-like leaves of *I. japonica* are a gray-green, but more green than those of the bearded iris. They are also less rigid, lending themselves to a softer, more fluid appearance in the bed. Averaging two inches wide and reaching a height of approximately two feet, the arching leaves of this seasonal bloomer make it a superlative middle-border contribution. Unfortunately, the leaves also provide a delectable feast and hideaway for snails and slugs. Baiting for these voracious and damaging pests is a must.

This orchid iris requires a position in the border or patio that offers partial shade. Morning sun would be acceptable. Protection from our intense afternoon sun is, however, a must. *I. japonica* is frost hardy, but cannot endure a freeze, and obviously should be lifted, potted, and protected in those areas that receive snow.

Since the spread of *I. japonica* is indefinite,

periodic division will be necessary. The bright side to this labor is the prospect of obtaining more plants! Because the flowers of this species are so spectacular, having more plants will be more than desirable; it will become requisite.

Which brings us to the flowers...

"Sumptuous" might just possibly be the most accurate adjective to use in explaining the graceful, arching sprays of this beauty. The flowers, which are prolific and carried on a long spike that bends and nods gently well above the curving leaves, are flat with frilled edges. The color of the petals can vary from white to the palest lavender. The crests, however, are always orange, and have a violet rim around each crest.

This combination is exquisitely delicate, yet any sense of delicacy is quite deceiving. The flowers are not fragile. The sprays make excellent and long-lasting cut flowers, adding floral elegance to any arrangement, much as a true orchid does. *I. japonica* blooms in early spring, and in my house is arranged with long-stemmed tulips or calla lilies or red ranunculus or any combination thereof. The result is always elegant and stunning.

I. japonica 'Nana' is well worth the effort it may take to locate, for it is not an iris that can be readily found at every nursery. I recommend calling around . . . and persisting. Happy gardening! □

CATHERINE ZINSKY is a garden writer for national magazines. Her most recent article was the center feature in *Houseplant* magazine.



GARDENING IN THE SAN DIEGO COUNTY INTERIOR

by CYNTHIA CARLSON

INCREASING NUMBERS OF PEOPLE are trading the confinements and discomforts of city life for a different set of discomforts in the country. Increasing numbers of people in San Diego County are following this widespread movement "back to the land." Twelve years ago my husband and I moved from the inner city life of North Hollywood, that has both maritime and interior weather, to country life in the foothills of Dulzura, thirty-five miles inland in southeast San Diego County, near the border town of Tecate. Here the climate is influenced by the ocean no more than 15% of the time. The difference between successful gardening in a mild-winter climate with an occasional frosty night and a few really hot summer days and gardening in an interior climate with at least two, and sometimes ten, consecutive nights of below freezing in winter combined with days-on-end temperatures of over 100° F in August and September is really mind-boggling.

Eleven years ago I began adapting to the harsh reality of the back country. My foremost need was for shade. Before shade grew or was supplied by trellises and shade cloth, only white sage (*Salvia officinalis*), California sagebrush (*Artemesia californica*), cactus, and buckwheat (*Eriogonum fasciculatum*) flourished. Later planted trees and their shade brought filtered sunshine that kept alive plants not normally growing here. Aleppo pines (*Pinus halepensis*) and male cottonwoods (*Populus fremontii*) were my first planting. Cottonwoods are deciduous here during January and February when winter sun is welcome. Their roots seek water and near a swimming pool, especially one with a plastic lining, pines would have been a better choice because their roots do not seek water.

About twenty eucalyptus, red gum (*Eucalyptus camaldulensis*), *E. calophylla*, and white ironbark (*E. leucoxylon*), were given to me by a neighbor who had lived in the area for some time. They proved to be fast growing and both drought and heat tolerant. I planted them as a grove between my house and the dirt road in front to provide a barrier against traffic and dust. They also provided shade in the morning to the front yard.

I did not want a lawn because of the work involved and because I did not have enough water to support it. Our well produced, at best, two gallons a minute and by the end of the summer, one gallon. So my thirty-five-foot lap pool became my "lawn." I have never regretted this choice even though another deeper well pumps better than four gallons a minute. Creating islands was my answer to designing the actual garden. The shallow S-curved outlines

of the islands became native rock borders for shrubs, trees and flowering plants. The islands also created interesting paths for exploring or resting. The paths varied in width from three to twenty feet. In large areas between islands I planted trees and grouped chairs. I used decomposed granite for the paths with plastic sheeting underneath to discourage weeds and to keep it from working into the soil and disappearing.

Each island had an outlet and valve for drip irrigation that enabled me to water each island independently. Every shrub and tree had its own emitter and large shrubs and trees had more than one. (It was easy to adjust as the plant grew.) As each island's plant community was designed with plants that required about the same amount of water, it was easy to individualize by adjusting the number of emitters. How often I turned on the drip systems depended on the weather.

My soil was fine silt (also called sandy loam) so it was deficient in organic material. Each shrub and tree was carefully planted in a large hole with about 25% organic material, slow-release fertilizer, and $\frac{1}{2}$ to $\frac{1}{4}$ cup of superphosphate. The soil was alkaline, so some plants like crape myrtles (*Lagerstroemia indica*) and New Zealand and Australian tea trees (*Leptospermums*) needed sulfur added to provide the acidity they like. No cultivation between plants was either necessary or desirable unless I needed to alter the soil of a large area for flowers or ground covers that grow by rooting as they spread. Instead of cultivating, I mulched. The two to three inches of mulch on all the exposed ground in an island or in any bed along the fences made the difference between constant watering and watering established shrubs and trees about three times a summer. Mulch also eliminated, to a large extent, the exposing of weeds every spring.

The selection of shrubs, the mainstay of the garden, was critical for a lush effect. I found that many natives that are indigenous to coastal areas or higher elevations will die here. They miss the morning fogs and damp, cooling breezes. I have learned to be wary of any native with the word "Catalina" or "island" in its common name. (Catalina cherry, *Prunus lyonii*, does very well.) If I wanted to grow a native that is not indigenous to this area and that prefers a moister, cool climate, I planted it in the filtered shade of taller shrubs or trees. The ground cover Carmel creeper 'Yankee Point' (*Ceanothus griseus horizontalis*) flourished under taller ceanothus, but 'Point Reyes' ceanothus shriveled in our heat. It helped to use a

spray-type attachment on the drip line for plants that do better on the coast. The spray emitters proved good for wild flower and non-native flower beds. Some small, tender shrubs also seemed to enjoy the spray watering. It was as a last resort that I added spray emitters to the drip lines, but often the additional water in the air made all the difference to the health of some plants.

Succulents have been successful, looking good all year in bloom or out. Not all succulents like the hot sun and even shade did not save them during hot summer months. Sedums and sempervivums that come from climates colder than the desert or semidesert regions were successful. I watched them carefully to see that they stayed plump and attractive. They seemed to enjoy humidity, so I sprayed rather than using individual drip emitters. Aloes, agaves, yuccas and dudleyas are larger-leaved and large-growing so they were useful for contrast with small-leaved plants.

On the bank side of the garden I used mainly chaparral shrubs that are native to the desert-type foothills. Any number of species could have been used but they were most effective when they were all a certain size. I planted manzanitas, matilija poppies (*Romneya coulteri*), bladder pod (*Isomeris*), sages (*Salvias*), buckwheats (*Eriogonums*), wild lilacs (*Ceanothus*), Apache plume (*Fallugia*), *Gaura*, brittlebrush (*Encelia*), and non-natives such as rockrose (*Cistus*), bottlebrush (*Callistemons*), New Zealand teas (*Leptospermums*), and Texas Ranger (*Leucophyllum*). The list is long, but be aware of a plant's eventual size before selecting and planting. Shrubs tend to lose gracefulness when they have to be pruned severely to "fit" their allotted space.

Ground covers used inland should be carefully chosen to withstand heat, low humidity and cold. *Myoporum parvifolium 'Prostratum'* was especially good, either under trees or on the bank. The native saltbush (*Atriplex canescens* or *A. lentiformis breweri*) grew well in sun or filtered shade, even under eucalyptus trees. Theodore Payne buckwheat (*Eriogonum fasciculatum 'Theodore Payne'*) thrived under the cottonwoods. Rosemary (*Rosmarinus officinalis*) endured hot sun, poor soil and, with good drainage, offered soft blue color throughout most of the year. It did much better for me in full sun than in any degree of shade. Dwarf coyote bush (*Baccharis pilularis 'Twin Peaks'*) was fast-growing and long-lived. It made a dense mounding mat about a foot and a half high and six feet across. It was high enough and dense enough to crowd out weeds. It took sun on my west facing bank, or semishade under a pine tree. Mexican evening primrose (*Oenothera berlandieri*) has a profusion of rose-pink flowers and thrived with little care after becoming established. It was easily pulled if it became invasive or unattractive when the flowers died back.

I brought a love of camellias and roses (so gratifying

to grow in North Hollywood) with me. So immediately I bought and planted my old favorites. After mourning the death of most of them, I finally discovered shade cloth. When I hung 75% shade cloth over the roses, they perked up. Now fully shaded, heavily mulched with horse manure, sprayed every-summer-through-early-fall morning and drip irrigated two or three times a week, they grow well. Camellias were more difficult, but by adding lots of peat moss amendment to their planting holes and placing them in a protected inner corner covered with shade cloth, I got five bushes to grow and bloom.

Planting procedures are demanding in the back country. It is usually best done in the fall or early spring. Make sure that water is allowed to drain twice in the original hole and make certain that the amended dirt around the root ball is kept damp. Feel the root ball often, once a day may be necessary, for at least two weeks to verify that it does not dry out nor stay soggy. Roots easily shrivel or rot. Once established, most drought resistant natives and exotics can live happily with very little care other than an occasional snip of the pruning shears—and many approving, loving smiles from you.

QUINTA HELENA GARDENS

By utilizing the most garden-manageable of the natives combined with large numbers of drought resistant exotics, I gradually succeeded in transforming my chaparral-covered eight acre plot into an oasis of beautiful landscaping. All grew exuberantly together—so well that pruning shears are my constant companion. As a result of my learning, I officially turned my landscape grounds into a demonstration garden for drought-tolerant and native plants. (It is open to the public by appointment, 468-3286.) Quinta Helena Gardens provides a mature garden in the back country where people can wander and study the various plants they can adapt to their own garden situation. As I tell visitors and my students at my gardening classes "If I can grow it in Dulzura, anybody can grow it." □

CYNTHIA CARLSON, a former elementary and high school teacher, now teaches Native Plants and Drought-Resistant Gardening classes through Sweetwater Adult School in Chula Vista.



LOTUSLAND — A PRIVATE PARADISE GOES PUBLIC

by GLORIA GLASSER

MADAME GANNA WALSKA WAS a discriminating visionary, orchestrating the transformation of her 37-acre estate in the heavily-wooded, exclusive coastal town of Montecito into "Lotusland." It contains fifteen superb gardens. Her astonishing wealth (amassed through six marriages and several divorces, and fortunes bequeathed to her by still-adoring ex-husbands) sets her apart from most of us dirt-digging, seed-sowing garden types. Yet, like most avid gardeners, she preferred to share with others the living tapestry of plants she and such luminaries of garden design as Lockwood de Forest and Ralph Stevens had created.

Upon her death in 1984, the private, nonprofit educational foundation called Ganna Walska Lotusland Foundation assumed the operation of the extensive grounds. Their directive: preserve and maintain this botanical jewel, a collection of rare plants and tranquil gardens-within-a-garden that is sequestered behind shaggy eucalyptus and picturesque native oaks off a narrow two-lane blacktop road. (A well on the property helped the extensive plantings survive recent years of severe drought that had transfigured many well-known green oases into dull brown eyesores.)

In 1993, when construction of facilities to accommodate cars and tour buses was completed, Lotusland opened for its first season of twice daily guided tours, Wednesdays through Saturdays. Visiting is not something one can do on a lark as Lotusland is situated in a residential area. Neighbors are concerned about traffic volume and the impact on their quiet, twisty, tree-shaded streets. Access to Lotusland is by reservation only, assigned parking permits and tour times, with absolutely no walk-ins permitted.

It is the present-day visitor's loss that Madame Ganna Walska is not still with us to enliven a tour with an appearance in her ever-present floppy sun hat and parasol. (Along with the parasols she collected full-size carousel figures and tapestries that she displayed in the main house designed by George Washington Smith.) The house, painted a gaudy shade somewhere between salmon pink and coral, is surrounded on one side by very rare weeping *Euphorbia* snaking among oodles of golden barrel cactus. She lived in a small wing off a narrow brick patio brilliantly ablaze with Martha Washington pelargoniums hung from moss baskets and cascading from stone troughs. Except for the Japanese garden during camellia-azalea-rhododendron season and splashes of impatiens, bluebells and *Begonia richmondensis* in shaded areas, Madame's little patio is the most throbbing colorful section of the entire acreage.

Madame Ganna Walska purchased Lotusland in 1941. She was not starting from scratch on a piece of raw

property. The estate traces its history into the nineteenth century when it served as home and growing grounds for Kinton Stevens, a pioneer plantsman. Many "test" plants he started on the property are still thriving. The Gavit family was the subsequent owner. To them it was "Cuesta Linda" and they created many of the gardens that Madame Walska was later to embellish or modify to her liking. In particular, she disdained the existing swimming pool's sterile, ordinary shape and setting. In redesigning the site she created the effect of a cool grotto framed by graceful deodars.

It would take reams of paper amply peppered with superlatives to evoke the individual gardens that comprise Lotusland. It takes its name from a collection of lotus (*Nelumbo*) that bloom during warm weather in the pond of the Japanese garden. Lotusland is a horticultural montage. One garden scene melds into another, yet the contrasts are acute: the dry, sunny hillocks where rare, mature cycads flourish give way to the so-called "rain forest", and, in a dense, aromatic grove of eucalyptus, moss baskets the size of an automobile tire contain orchid cactus (*Epiphyllum*). For every plant, Madame Walska tried to provide an environment as close to "home" as possible.

Perhaps one of the most impressive things about Lotusland is the meticulousness of its grounds. Each garden has its own caretaker. Madam Walska preferred plantings that provided views in the round, and this has been accomplished successfully throughout the gardens. Thanks to the privileges of wealth, she was able to acquire scores of her favorite plants. There is no skimping on quantity or quality. Garden ornaments, too, were collected copiously. These run the gamut from whimsical statuary removed from Madame's French chateau, elegant stone pagodas and strangely-shaped rocks, to ... slag. Many of the garden pathways are lined with chunks of translucent green slag from Arrowhead Water Company. (Bottles used to be made of glass and when melted down had an arresting resemblance to hunks of gemstones.) A small roadside planting is called the "Amethyst Garden" and the plants are set among a display of polished geodes worthy of a top-of-the-line gem and mineral show.

Though it has been written that "the heart of a garden dies with its owner," fortunately it is not the case here. Inspired by Madam Walska's example, many of her Montecito neighbors have directed that upon their deaths rare plants in their gardens be removed and relocated to Lotusland. Perhaps Lotusland's most abiding purpose is in reminding us of the generosity of gardeners, such as Madame Walska, who bequeathed to a world of strangers a gift of immeasurable beauty. □

Lotusland is located south of Santa Barbara in Montecito. For information and reservations phone (805) 969-9990.
GLORIA GLASSER writes articles on horticulture and wildflowers.

STUDYING IN THE RAIN FOREST

by MICHAEL RAFFAEI

Michael Raffaeli is the recipient of the 1993 Hoyt Scholarship. He is a senior at University of California, San Diego majoring in ecology. This is a letter he sent to San Diego Floral Association describing his experiences in Costa Rica. He was studying Rain Forest Ecology and Species Diversity.

IT IS EVERY ECOLOGY student's dream to have the chance to see a rain forest. I was fortunate enough to take not only a leisurely tour through the towering canopy, but to study the intricacies of the biotic relationships that exist there. Together with my classmates, I examined many parts of the moist cloud forest, from the evolutionarily fine-tuned wasp and fig tree symbiosis to the unique floral morphologies of over one hundred different species of plants. During the first five weeks of the program, the whole class was involved in these projects. The last five weeks, however, were dedicated to independent studies that each student chose to carry out.

Each night, as the sun began to set, I ventured out with a partner, rain or clear skies, into riparian corridors. Amid the orchestra of sounds in the trees and air around us, we set up mist nets to catch the flying nocturnal animals that are responsible for much of the pollination and seed dispersal in the rain forest. I was out and about from dusk to ten at night catching bats, identifying them to species, and then releasing them. My project dealt with determining if the diversity of these chiropterans differed over an elevational gradient in a preserved cloud forest. The local communities that surrounded this section of forest were largely dedicated to growing coffee. This area is covered by trees and filled with animals (like bats) and a multitude of different insects. It was once coveted for its ability to produce coffee, which increases as one rises in elevation. Although

much of the land is already preserved by private interest groups and the National Park Service, I found it important to show that a biodiversity had indeed been rescued by saving large tracts of land that covered a variety of altitudes.

Trapping bats was a lively experience. Every evening, the excitement grew as I found and identified a species of bat I had not previously caught. With rain falling from the sky, drip-dropping off the leaves, we carefully pulled bats from the nets. Sometimes they would sink their razor sharp teeth through the leather gloves we wore, just to remind us that they were wild animals. Others were gentle, and some would even hang upside down off our gloves for a few minutes before they flew back into the dark night.

After finishing the fieldwork for my study, my data suggested that there was a difference in species composition among the two different elevations. This was consistent with other studies that have been done in other areas like the Andes in Ecuador. Unfortunately, I could not determine from my study what effect the difference in bat populations has on the rest of the community, particularly the plant community. Perhaps, the composition of plants at

different altitudes is what determines the types of bats that are found in each area. Only further studies will be able to tell.

I would again like to thank the San Diego Floral Association for the Hoyt Scholarship. It has helped me to expand my education through the Costa Rica field study. Enclosed is a picture of me holding a bat. We could not identify this bat, because supposedly no white bats are found in the areas we were trapping. After talking with a bat expert who was studying in the same area as us, we think it is probably an albino, but it also could be a white tent-making bat. □



RIVERSIDE DEMONSTRATION GARDEN

by BETTY NEWTON

RIVERSIDE DEMONSTRATION GARDEN shows how to do it. For some reason the one-acre garden called "Landscapes Southern California Style" in Riverside, California, is a secret to most Southern Californians. There was one article in *Sunset* magazine, but we don't seem to notice until a friend starts raving.

Landscapes Southern California Style opened in June 1989 after seven years of planning. The purpose of the garden is to show people how to have beautiful yards using less water. So far about twelve thousand people go through each year.

What do they see and what's there for you? Have you seen the spreading African sumac tree? Or the fine, bright green 'Centennial' form of shrub chaparral broom? Or little, deep-blue-flowering *Salvia chamaedryoides*? Or the yellow flowers of spreading Arizona primrose (*Calylophus*)? What about the delicate 'Wildwood' form of flattop buckwheat?

There is no doubt that this garden raises gardening with natives and other dry area plants to an art. Credit goes to the designers (among them Susan Frommer, Cherri Baird, and Jean Marsh) who envisioned the beautiful walks and lines; to those who constructed the superb arbors, bridges, paths and gazebo; and to the maintenance crew who garden year round.

This garden is a joint project of the area's water supplier, Western Municipal Water District, University of California Cooperative Extension, California Department of Forestry, students at Mt. San Antonio Community College and landscape industry businesses. Apparently everyone pitched in on this project.

Tim Barr, program assistant, suggests we not go in late summer when they make changes and replace plants that are not succeeding. I know that mid-April with the rock roses and everything else in bloom is beautiful. Mid-June is nice, too, when masses of godetia/clarkia bloom and the greens show good contrast.

Thanks to clear labeling and graphics, you can educate yourself here. I've seen couples notepad in hand, doing just that. You can learn from the giant coral bells (*Heuchera maxima*) blooming in the shade, the lavenders, *Photinia*, *Echium* (pride of Madeira), fox-red curly sedge grass and fine groundcover myoporum.

Landscapes Southern California Style is less than two hours north of San Diego traveling I-15 and five minutes west of 215 at 450 Alessandro Blvd., Riverside. Hours are 10 a.m. to 4 p.m.. Phone (714) 780-4177. □

BETTY NEWTON is a garden writer and teaches classes on gardening in Grossmont Adult School.



Photo by Betty Newton

A FEW DROUGHT RESISTANT FAVORITES

DURING THE DROUGHT we learned to use old favorites like scented-leaf geraniums and many new plants. Among these are the adorable indigo blue *Salvia chamaedryoides* that blooms for many months on a spreading, two-feet tall, grayish, small-leaved plant. Ask for it at your local nursery. *Bulbine caulescens* is new to many San Diego gardeners. Because the plant has dark-green, onion-like foliage and delicate yellow spires of flowers from February to April it is proving useful. As a succulent it roots easily. It is primarily available garden-to-garden now. □

by Betty Newton



Now is the Time . . .

A CULTURAL CALENDAR OF CARE FROM OUR AFFILIATES

AFRICAN VIOLETS

Helen LaGamma

NOW IS THE TIME

TO WATER only when soil is dry when watering from the top.

TO KEEP all areas clear of plant clutter. Use only clean sterile equipment. Have the area well-ventilated.

TO PROVIDE 12 to 14 hours of indirect lighting daily.

TO PROTECT plants from any sudden change in temperature—maintain 65-75 degrees.

TO POT UP babies in 2½-inch pots using a light, porous, sterile soil with good drainage.

TO PRACTICE preventive measures against insects and disease—have clean hands and clothing.

BEGONIAS

Margaret Lee

NOW IS THE TIME

TO PUT down tubers to sprout.

TO CLEAN all pots and plantings of dead wood, leaves, and old debris.

TO PROTECT roots with a mulch.

TO START feeding; give ¼ strength of any good all-purpose plant food if feeding once a week, ½ strength if twice a month; full strength if once a month.

TO CONTROL disease and pests by spray and bait.

TO KEEP plants moist, but not wet.

TO START new plants from leaves, cuttings, or seeds.

BONSAI

Dr. Herbert Markowitz

NOW IS THE TIME

TO WATCH watering program according to the rains.

TO GRAFT deciduous plants.

TO REPOT plants; shape to conform to the container.

TO REMEMBER deciduous flowering plants need repotting every year, except quince. Conifers may go three to five years without repotting.

TO ADD small amounts of chelated iron or acidifying preparation to correct alkaline (salt) buildup.

TO WATCH for aphids and other pests.

TO WAIT until April to feed. Use a high nitrogen fertilizer for foliage growth; high phosphorous type to set flowers and fruit.

TO USE ¼ strength fertilizer spread several weeks apart, rather than using full strength only one time. Measure accurately. Too much fertilizer can burn roots and cause leaf damage.

BROMELIADS

Bromeliad Study Group of Balboa Park

NOW IS THE TIME

TO CHECK plants for scale especially during spring when scale is most likely to appear.

TO TREAT plants with scale by dipping or spraying them thoroughly with a solution of Cygon 2E according to directions on the label. Drain excess solution from plant.

TO KEEP plants clean. Cut spent blooms and dead leaves.

TO REPOT your favorite plants in new potting media. This helps them to develop a healthier growth.

TO ALWAYS provide a good drainage and never allow the soil to become soggy.

TO FERTILIZE only during the warm months, once a month, preferring a fertilizer high in acid. Use ½ the recommended strength on the label.

CACTI AND SUCCULENTS

Joseph A. Betzler

NOW IS THE TIME

TO PREPARE plants for spring growth by checking soil and pot condition—transplant if needed. Soil mix should be light and water should flow freely through it.

TO FERTILIZE your plants on a regular basis.

TO START acclimating the protected plants to outdoor conditions once again, after danger of frost is gone.

TO PROTECT sensitive plants from the rain and sun; bright sun can burn indoor plants.

TO KEEP newly purchased plants separated from your collection until they show signs of good growth without any pests or disease; treat any pest soon, watch for snails also. The wet winter might bring you rodents; mice and rabbits are cute but no cacti are safe from their nibbles. Protect your plants.

CAMELLIAS E. C. Snooks

NOW IS THE TIME

TO KEEP up a proper watering schedule especially if little rain occurs.

TO FEED with cotton-seed meal or commercial fertilizer.

TO KEEP blooms picked up to control petal blight.
TO ADD iron for good leaf color.

TO TRANSPLANT older plants or plant new ones.

TO PRUNE out any unwanted growth—open the center to allow air circulation.

TO LOOK for loopers and aphids—spray with malathion or Cygon.

TO LOOK for new varieties while still in bloom.

DAHLIAS Abe Jansen

NOW IS THE TIME

TO PLACE tubers in starting medium such as vermiculite or sand. Keep in a warm place to sprout; beware of too much moisture.

TO PREPARE the planting area by adding humus and fertilizer.

TO PLANT sprouted tubers, sprout side up, six inches below ground surface, two inches from stake, and cover with two inches of soil.

TO MOISTEN, but do not keep wet.

TO PROTECT new growth from snails.

TO BE SURE to drive stake into ground before planting tubers.

EPIPHYLLUMS (Orchid Cactus) George French

NOW IS THE TIME

TO FEED epiphyllums with a low nitrogen fertilizer.

TO CHECK trellis to be sure plants are well secured.

TO GIVE plants filtered sunlight to encourage development of buds.

TO BAIT for snails; a few granules of Sluggeta have proven effective when placed at the base of the plant; they leave little or no residue.

TO CHECK for drainage in April. Do not move plants at this time, but continue to feed for bloom; use Hi-Bloom or Bloom-builder type to promote healthy buds and bloom.

TO TAKE cuttings.

TO REMOVE buds from a new plant; that energy needs to go to the root system.

FERNS

Raymond Sodomka

NOW IS THE TIME

TO FERTILIZE with high nitrogen liquid or pellets.

TO REMOVE dead fronds.

TO CATCH rain water for plants in covered areas.
TO DIVIDE, repot or add leaf mold to those plants needing it.

TO SPRAY for aphids and scale.

TO PLANT spores.

TO USE Vitamin B1 after dividing; use per instructions on label.

FUCHSIAS

NOW IS THE TIME

TO PRUNE plants not done earlier.

TO PINCH new growth on plants pruned earlier. As the third set of leaves forms on new growth, pinch out the terminal set. This will result in a bushier plant.

TO FERTILIZE with any good balanced fertilizer.

TO WATCH for insects and treat accordingly.

TO WATER thoroughly the day before spraying.

TO CONTINUE taking cuttings from prunings.

TO CLEAN up fallen leaves, blooms and other trash.

GERANIUMS (*Pelargonium*) Carol Roller

NOW IS THE TIME

TO WATER thoroughly when plants become somewhat dry. Allow the excess water to drain away. Keep foliage as dry as possible.

TO CONTINUE feeding with a balanced fertilizer dissolved in water, using less than the recommended amount as often as needed to keep plants growing well. Long term pellets may be used instead.

TO CONTINUE pest and disease prevention, using all products according to directions.

TO PRUNE and pinch ivies and zonals for future bloom. Avoid cutting regals, scented and related types because their flowers will be lost by pruning them at this time.

TO MAKE cutting from the ivy and zonal prunings.

TO REMOVE faded flowers and old discolored leaves.

TO ROTATE pots on a regular basis in order to produce well-shaped plants.

IRIS

San Diego/Imperial County Iris Society

NOW IS THE TIME

TO START feeding low nitrogen, all-purpose and liquid fish fertilizers.

TO WATER regularly if no rain.

TO CLEAN beds and keep weeds under control.

TO WATCH for pests—systemic sprays applied as a drench will usually free iris of aphids and thrips.

TO GIVE Japanese and Louisiana irises a application of an acid food—a camellia-type fertilizer is convenient to use.

ORCHIDS

Charles Fouquette

NOW IS THE TIME

TO REPOT cattleyas that have exceeded their pots and are showing new eyes.

TO MOVE cymbidiums that are in spike to a shadier spot to lessen fading.

TO PROTECT cymbidiums from possible hail and rain.

TO SET OUT slug and snail bait, check for red spider, scale and mealybug. Try to keep ants out of your domain: they bring aphids and other pests.

TO CONTINUE even fertilizer feeding of *Phalaenopsis*: plants in bloom should be protected from drafts.

TO GROW the *Oncidium* alliance, *Odontoglossum*, *Brassia*, etc. with some research. Air movement, light, feeding, and good sodium-free water are some of the requirements for successful growing.

TO CHECK air cooler and fans; they may need oil.

TO FLUSH and reset any water filters or reverse osmosis units.

TO WATCH for plants that may get sunburned and protect them.

ROSES

NOW IS THE TIME

TO CONTINUE planting bare-root roses.

TO DISBUD by removing side buds on hybrid teas and center buds on floribundas.

TO CONTINUE applying weekly applications of Funginex.

TO BEGIN using Orthene as needed by mid-March.

TO USE high-pressure water wand for mites as needed through September.

TO IRRIGATE 1.5 inches, twice a week through June.

TO APPLY weekly 1 tablespoon per plant of sulfate of ammonia (21-0-0).

TO APPLY 1 tablespoon per plant of sulfate of potash (0-0-25) on about 1 March.

GREEN THUMB ITEMS

NOW IS THE TIME

TO PLANT high-moisture plants where fire-retardant plants are needed. Sea fig, commonly planted along freeways, has 60% moisture. Other desirable plants are strawberry tree, carob tree, pineapple guava, pomegranate, oak, oleander, cape honeysuckle, dwarf coyote bush, ice plants and other succulents.

TO START feeding houseplants a liquid houseplant food when the growing season begins in March.

TO CUTBACK to the roots some herbaceous perennial plants: mums, columbine, coreopsis, some true geraniums, ornamental grasses, evening primrose,

many salvias, and Shasta daisies.

FRUIT TREES AND VINES

Vincent Lazaneo, Hort. Advisor, UC Coop Extension NOW IS THE TIME

TO IRRIGATE when new growth begins, if the soil is not moist, to a depth of 3 feet.

TO APPLY fertilizer high in nitrogen. Most mature fruit trees require the equivalent of one pound of actual nitrogen annually. Divide the amount of fertilizer required into three equal lots and apply them six weeks apart, starting in the spring after new growth begins.

TO BEGIN thinning fruit of apples, pears, and stone fruit when they are about 1/2" in size. Space fruit four to six inches apart or leave one fruit per spur. Thin early maturing varieties earlier and heavier than late maturing varieties.

TO CHECK trees for pests. Wash foliage periodically with a forceful spray of water to dislodge aphids, spider mites, and whiteflies. If a pesticide is needed, use a chemical which has short residual activity, such as insecticidal soap or pyrethrin to protect beneficial insects.

TO KEEP ants off trees by wrapping a band of heavy paper around the trunk and applying a barrier of tanglefoot on it, or by scattering diazinon granules on the soil around the trunk.

TO SPRAY apples after bloom to control codling moth (wormy fruit). Apply diazinon after petals have fallen and twice more at two-week intervals.

TO APPLY sulphur dust to control powdery mildew on grapes when new shoots are 6, 12, 18, and 24 inches long. Then, every two weeks or as needed until harvest.

VEGETABLES

Vincent Lazaneo, Hort. Advisor, UC Coop Extension NOW IS THE TIME

TO PREPARE soil for planting by incorporating compost and a complete fertilizer high in phosphorus. Apply chemical fertilizers just before planting. If manures are used, apply them at least two weeks before planting and irrigate to leach salts from the surface soil. Apply twenty pounds of poultry manure or fifty pounds of steer manure per hundred square feet.

TO MAKE last planting of cool season vegetables such as leaf lettuce, beets, and kohlrabi which will mature before hot summer weather arrives.

TO SET OUT tomato transplants after danger of frost has past. Delay planting beans, corn, cucumbers, eggplant, melons, peppers, and squash until the soil is warm. Use hot caps or floating row covers to promote faster growth.

THE GENUS WATSONIA

BY JIM DUGGAN

I WAS INTRODUCED TO the wide variety of watsonia when I visited the Huntington Botanical Garden. The large, venerable stone pine proudly anchored the gravel path. A myriad assortment of shrubs and smaller trees drew my constant attention. Around and between the shrubs were sword and strap-shaped leaves of many bulbs. A small sign, filled with vital information, labeled each. I quickly copied down names and descriptions. A few steps further and I was stopped by a bright red watsonia. The large, striking flower was borne on plants less than 24" in height. This was *Watsonia spectabilis*.

I had of course seen the hybrid watsonias grown in many gardens—the tall pinks and whites. But this was different, shorter and of spectacular color. I have since learned that the genus *Watsonia* varies greatly in size and color. Within the fifty-two species are eight-inch dwarfs and giants reaching to six feet. The sword-shaped leaves grow from a cormous rootstock that is planted in the fall. The flowers vary from an open funnel (flared) to a long narrow tube. The plants are mainly winter and spring growing and dormant in summer. Yet there are several evergreen species. The blooming period spreads over the entire year.

The season begins in late November with a species unique to the genus. *W. hysterantha* flowers before the leaves develop. The inflorescence reaches to 24" and is bright orange-red. An evergreen species, *W. pillansii*, also flowers in November. The 15" leaves sport clear, light orange blossoms. This is a repeat of a late July flowering.

After these early blooms there is a three-month gap before the genus flowers again. In mid-March we have *W. aletroides*, 14-40", with tubular red flowers. Great for hummingbirds. Next is *W. laccata*, 16-34" with pastel pink blooms. An uncertain species follows. *W. intermedia* has wide open pale pink flowers with deep pink edging. At 13-14" this mid-sized Watsonia does well in the garden. The end of March brings the dwarf *W. humilis*. At 6-12" the flowers can be pink or white. Next is the larger flowered *W. coccinea*. The one-foot plants have red-orange flower spikes reaching to 18".

Another evergreen species follows with *W. angusta*. Deep orange flower clusters reach to 57" on 30" plants. A great cut flower arrives with the white blooms of *W. ardernei*, growing 24-41".

April brings the taller pink flowered *W. borbonica*, reaching to 50" with large 2" blossoms. The tallest member of the genus arrives next with *W. vanderspuyae*. Two foot plants send up spikes reaching six feet. The color is a very nice mid-red. Another good garden plant

is *W. bulbillifera* at 28-56". The light orange flowers are followed by cormlets forming on the flower spike. The dwarf *W. stenosiphon* ends the month. The color is orange with a red interior. The leaves are spotted red.

Three more evergreens flower next. In May *W. tabularis* blooms with coral-orange flowers. The leaves are wide on the 30" plants. June brings *W. fulgens*, a little smaller and with orange flowers. July and August bring us back to *W. pillansii*, described earlier.

Watsonias are easy to grow. Fertilize them with 1/2 strength liquid fertilizer—low in nitrogen—during the growing period; stop fertilizing after flowering. Plant them in the fall; divide clumps every tree to four years. □

JIM DUGGAN is a recognized expert on South African bulbs. He cultivates his bulbs in Leucadia. Photo by author.



Watsonia aletroides



Book Reviews

ORCHIDS OF MALAYA

L. B. Segerback

Rotterdam, A.A. Balkema Publishers, 1992, 168 pages, 26 color photos, 229 b&w photos, 8" x 11", hardcover, \$67.00

About 50 genera with over 130 species are described, all native to the Malaya area. Nearly every species written about has a black & white photo and 26 of them have color photos. I will describe this as a researcher's book rather than a coffee table book. No cultural advice, but it does contain very complete "metric" descriptions. It does have a good botanic glossary with special reference to orchids consisting of seven pages.

Reviewed by H. Tolen

ITALIAN GARDENS

Charles A. Platt with overview by Keith N. Morgan

Portland, Sagapress, Inc., Distributed by Timber Press, 1993, 172 pages, 74 b&w photos, 30 b&w illustrations, 7 3/8" x 10 3/8", hardcover, \$34.95

The original edition of *Italian Gardens* was published in 1894 and contained materials exclusive to the Italian villa landscape. The book that was out of print for some time, has been reprinted with the original text and photographs plus additional photographs by Platt not included in the original edition.

Charles Platt traveled to Italy in 1892 to research the Italian villa concept of landscaping. Platt's book was the first publication in English on the topic of Italian gardens. These gardens depict the formal style of landscape modeled after the great Renaissance gardens. The gardens he visited had passed through many changes, but, most of them had retained something of their outstanding features. A strong theme of this landscape was the harmony of arrangement between the dwelling and the surrounding gardens, terraces and groves. Approximately 20 gardens are discussed. Size is not given, only statements such as: very large, or many acres. Common throughout the pictures are trimmed boxwood hedges, expansive walkways, fountains, terraces, large stone benches and stairways, archways and sculptures.

Several landscape architects, including Frederick Law Olmstead, were not favorably impressed by Italian

Gardens, and felt that the type of landscaping depicted would only be suitable in the American South.

Keith N. Morgan is a historian who has written extensively on historical landscape architecture. With this publication, he aims to place Charles Platt in American landscape history.

Reviewed by Dorcas Utter

A GARDENER'S BOUQUET OF QUOTATIONS

Maria Polushkin Robbins

New York, Dutton, Publ. by Penguin Group, 1993, 270 pages, 35 b&w illustrations, 6" x 6 1/2", hardcover \$18.00

A Gardener's Bouquet of Quotations is newly sprouted on the horticultural library market, having been released to bookstores last September.

Most garden clubs start their business meetings with an inspirational poem or quotation and it's a blessing to find such a treasury in one book.

In your search for just the right quotation, be it clever, profound or merely beautiful, you'll find it in this book.

Buy it. You'll be glad you did, and so will your friends.

Reviewed by Jo Rathmann

BEAUTIFUL CACTI: A Basic Grower's Guide

Gerhard Groner and Erich Gotz

New York, Sterling Publishing Co., 1992, 96 pages, 65 color photos, 10 b&w drawings, 6 1/2" x 9", softcover, \$9.95

This short book was originally published in Germany in 1990. The translators have done an excellent job and the text is very readable. Beginners as well as long-time collectors will enjoy these high quality photographs and black and white drawings. The authors begin with a look at the structure of cacti and then discuss their proper care and correct propagation. The section on diseases and pests has color pictures that are especially helpful in identifying problems, and the list of recommended cacti emphasizes flowers, again illustrated in beautiful color. This is a good addition to any collection of books on cacti, and it would be an ideal choice of a gift for a beginner.

Reviewed by Elsie M. Topham

THE ROCK AND WATER GARDEN EXPERT

D. G. Hessayon

New York, Sterling Publishing Co., Inc., 1993, 128 pages, 251 color photos, 7 1/4" x 9 3/4", softcover, \$9.95

Books published in England sometimes need a degree of interpretation, and this one is no exception. It is a new title in this author's excellent EXPERT series, and it follows the usual format and style. All photographs and illustrations are in color, and the text is designed so that it is easy to use. Dr. Hessayon makes a definite

distinction between rock gardens and water gardens, and he includes two chapters in which he makes short surveys of the history and development of each type.

Along with information about different types of rocks and different styles of fountains he supplies a good list of plants and also of fish and wild life. He discusses likely troubles and problems. This is a comprehensive book. It gives clear instruction, with many illustrations, so that do-it-yourselfers can design and construct their projects.

In arid climates the use of ornamental water is particularly pleasant, and with proper recycling and conservation techniques it need not be an extravagance; so this book deserves attention.

Reviewed by Elsie M. Topham

BONSAI MASTERCLASS

Peter Chan

New York, Sterling Publishing Company Inc., 1993, 160 pages, 111 color photos, 140 b&w photos, 7½" x 9¾", softcover, \$14.95

World-famous Bonsai master Peter Chan provides inspiration for all those interested in beginning or mastering bonsai. This book would be excellent for beginners; the writing is very clear and photos showing pruning and shaping procedures are outstanding. In fact, Larry Bray's photos on clipping and wiring down the limbs on bonsai are so impressive that although you may have a book or two on bonsai, this paperback with its modest price is worth adding to your garden library. It even includes helpful photos of tools used in bonsai, only a few of which are specialist tools.

Reviewed by R. Cox

BARK: The Formation, Characteristics, and Uses of Bark Around the World

Ghillean Tolmie Prance and Anne Prance

Portland, Timber Press, 1993, 176 pages, 177 color photos, 3 b&w illustrations, Hardcover, \$49.95

This is one of the few books written with special emphasis on the bark of trees. The spectacular color photographs by Kjell B. Sandved, well known photographer for the Smithsonian Institution, are accompanied by an explicit yet easy to read text.

The authors explain how the characteristics of bark, when added to other factors such as leaf, flower and fruit structure provide information beneficial in the identification of a species of tree. Bark characteristics include texture, color, odor, and thickness as well as the presence of latex, resin or sap. Tree bark can be thin, thick, corky or scaling and these various forms are basically the result of adaptations to the environment. For example, in arid regions the bark is frequently thin and green with photosynthetic properties to take over the process of food production when the tree drops its leaves to conserve moisture. In areas subject to natural fires,

trees frequently develop a specialized thick, corky bark for protection. Some trees have spiny structures in the bark of the trunk and limbs to protect them from browsing predators.

Discussed in detail by the authors are the many uses of products from bark. For example, latex is important to the tree as a defense against insects and to humans as a source of rubber. Resins, mainly from the inner bark, are used as an ingredient of varnishes, shellac, and lacquers, and are also a source of incense. Both medicines and poisons are derived from chemical compounds in bark. The chapter on Bark Cloth gives not only its history, but detailed information and procedures for processing the different types of materials. The authors describe how bark has been used by varied craftsmen in many parts of the world. Bark provides camouflage for many insects that have evolved to look very much like the areas where they rest during the day. Many animals, such as deer and rabbits, feed on bark. Some birds and mammals are able to extract sap from the bark as a source of food.

The photographer has compiled an informative chapter on the types of camera, lens, and films he uses, and he also describes an eight step procedure for others to follow to achieve as sharp a picture as possible. The exquisite clarity and color of the photography in this book merits its place in any horticultural book collection.

This book will definitely change the way the reader looks at the 'covering' of a tree, and will provide a greater depth of understanding of the various bark structures. The compilation of this extensive range of material in one well written and beautifully illustrated publication will appeal to a wide range of readers and increase the appreciation of trees.

Reviewed by Dorcas Utter

VISITING EDEN: The Public Gardens of Northern California

Joan Chatfield-Taylor

San Francisco, Chronicle Books, 1993, 132 pages, 146 color photos, 3 color maps, 9½" x 10", softcover, \$18.95

This is a lovely picture book on the public gardens of Northern California. It devotes several pages of text and photos to each of twenty-one gardens and includes directions and a handy map of the locations. Though it includes the history of the gardens and gardeners, suggestions on when to visit, which paths to take when you get there, this book is more of an invitation to visit than an end in itself. If you are traveling north anytime soon I would recommend this book for suggestions for side trips. *Visiting Eden* is also a good gift idea.

Reviewed by Cristina Shepard

Wildlife and Wildflowers Abound at Blue Sky Reserve

by Ethan Rothman

AS YOU STAND AT the entrance to Blue Sky Reserve in Poway and gaze over the immediate landscape, you may wonder if you are in the right place. With cars whizzing by you at fifty mph, large expensive homes looming on the right, dead avocado trees to your left, the three hundred foot wide strip of scrubby plants in the middle seems less than entralling. Perhaps though, this uninspiring entrance is the key to Blue Sky's pristine state.

A mere one hundred yards down the trail, the sounds and sights of the city diminish as century old oak trees encircle you. Just ahead is the sound of water cascading freely down the hillside. The trained eye may spot several homes of the dusky, footed wood rat within the first quarter mile. Up above, vultures soar, hawks call and songbirds titter about. Around you, lizards, snakes and small mammals watch as you pass though their home.

You are more likely to see hawks, warblers and lizards than you are the coyote, bobcat and deer, but they all are here. Blue Sky offers excellent opportunities to see songbirds, raptors and small mammals and is included in the California Wildlife Viewing Guide.

The centerpiece of the reserve is a riparian (or streamside) corridor flanked by oak woodlands. Leaves crunch underfoot as you walk through groves of oaks and past willows and seventy-foot tall sycamores. Stop and listen for the drumming of woodpeckers, the croaking of frogs, and the chirping of crickets. Smell the damp air and closely look in the sand and soft mud for footprints of coyote, raccoon, toads, and opossum. And don't forget; always keep an eye out for the beautiful and abundant poison oak.

Many people hike the trails beneath the oaks and sycamores and never realize that over half the reserve consists of coastal sage scrub and chaparral. To the untrained observer, these two habitats look like nothing more than a collection of dry brushy weeds. A closer look, or a view aided by a trained docent, reveals a remarkable collection of plants and animals adapted to life in a hot, dry area with rocky, nutrient-poor soil.

California buckwheat is a prime example of surprises waiting to be discovered. A casual observer may see nothing more than a weed with rusty brown seeds drying in the sun. A closer look reveals umbels of tiny white flowers resembling peach or apple blossoms, each topped with neon pink anthers.

Vines of wild cucumber wind their way skyward during the winter, producing flowers and large green spiked fruit by early summer, and then retreating for the summer and fall. Although it may look dead, the plant is alive and well and being nourished by a large underground tuber. This plant is commonly called man root as some tubers have been found in excess of 22 lbs.!

Winter rains and spring warmth paint the canyon with splashes of color as the hills abound with wildflowers. New plants sprout and bloom continually from February through June. You can walk the canyon several times a month during this period and discover new flowers and ferns each time.

A small section of the reserve burned this past fall, but already it is alive with new growth. It is a mistake to think all fires devastate wild areas. Fires devastate homes and buildings; they merely burn wild areas, clearing away the thick growth and understory allowing a new generation of plants to replace them. Blue Sky is expecting to play host to a recurrence of flowers and plants that have not been seen here since the last fire twenty-seven years ago.

The water conscious gardener would do well to hike the canyon and take notes. Take nothing more though as all plants, animals, and artifacts are protected. Although not always easy to find, most native plants are legally available at specialty nurseries. My neighbors laughed as I searched out drought tolerant native plants for my front hillside. Now they stop by to admire the ever-changing color of my unique low maintenance plantscape.

Blue Sky Reserve is located in Poway on Espola Road one half mile north of Lake Poway and is owned by the California Department of Fish and Game. Guided walks are offered every Saturday and Sunday morning at 9:00 AM and Saturday afternoons at 4:00 PM. These are slow-paced, leisurely walks focusing on the unique plants and animals of these habitats. Longer walks; including hikes to the burned area, Ramona Dam, early morning wildlife watches, owl prowls, and campfires will be offered throughout the spring and summer.

For more information on programs or volunteer opportunities, call the Reserve office at (619) 486-7238. □
ETHAN ROTMAN is a Wildlife Naturalist with the California Department of Fish and Game. He has worked fifteen years with National Parks, State Parks and a variety of other agencies. Rotman is a recent transplant from Northern to Southern California and loves it here. He spends his spare time landscaping his own one-half acre with natives and drought tolerant plants.

SAN DIEGO FLORAL ASSOCIATION TOURS

SATURDAY, APRIL 23, 1994 ROSE BOWER COTTAGE GARDEN JUDY'S PERENNIALS

Once each year this private garden in Temecula is open to the public when the generous owners, Mr. & Mrs Melvin O'Hair, share the wonders of **ROSE BOWER COTTAGE GARDEN** with garden lovers. You will stroll through five acres of spring blooming rose bushes (more than 2500), trees, shrubs and bulbs in the hills above Temecula. Aside from roses, prepare for a vast display of iris, petunias, foxgloves, lavender, pansies and pinks in every available nook. This is the ultimate English garden design with bursting borders along the many paths that wind over the gentle hills. An added garden event will be a demonstration of drying flowers and making a potpourri. Good walking shoes, a camera and a sun hat will be needed.

Lunch is included as well as a stop at **JUDY'S PERENNIALS** that will open just for us on that day. Please indicate your lunch choice on the coupon: catch of the day (fish), chicken teriyaki, or stuffed beef roll.

SATURDAY, APRIL 23, 1994 TEMECULA ROSE GARDEN *Lunch is included*

- \$39.00 Members (who pay dues to SDFA)
- \$42.00 Non-Members, Members of Affiliates

Make checks payable to San Diego Floral Association
Mail to SDFA, Casa del Prado
Balboa Park, San Diego, CA 92101-1619

Please include a stamped/addressed envelope

Name/Phone:

Address:

- FISH
- CHICKEN
- BEEF

PICK-UPS

- Red Lobster Park and Ride Grossmont Center, La Mesa 8:00 a.m.
- Fashion Valley SW corner near Penney's 8:30 a.m.
- Park & Ride lot, Hwy. 78 & Broadway, Escondido 9:15 a.m.

FRIDAY, MARCH 18, 1994

SHERMAN GARDENS CHELSEA AMERICA FLOWER SHOW

Thousands of Americans have journeyed to England to see the world famous Chelsea Flower Show. Thousands more have wished they could go; and now a version of that superb event will be held here in California. Join us and tour the 20 splendid acres where fully planted model gardens, floral, horticultural and special exhibits will be created.

Browse the Design Arcade where the dramatic table settings and floral centerpieces should be outstanding. When you're weary, be seated at one of the seminars, lectures or demonstrations presented by English experts. The featured speakers will be: Lady Henrietta Randolph Churchill, Lord Kennelworth, David Stevens (author, BBC personality), Kathy Wilkinson Barrage (based on her book). Enjoy a special buffet lunch and exhibits by cut flower distributors and plant societies.

All of these wonders will be "instant creations." To provide stability we'll stop at the renowned Sherman gardens. This two-acre jewel is one of the most beautiful attractions in Southern California.

FRIDAY, MARCH 18, 1994 CHELSEA AMERICA FLOWER SHOW *Lunch is included*

- \$43.00 Members (who pay dues to SDFA)
- \$46.00 Non-members, Members of Affiliates

Make checks payable to San Diego Floral Association
Mail to SDFA, Casa del Prado
Balboa Park, San Diego, CA 92101-1619

Please include a stamped/addressed envelope

Name/Phone:

Address:

PICK-UPS

- Red Lobster Park and Ride Grossmont Center, La Mesa 7:30 a.m.
- Fashion Valley SW corner near Penney's 8:00 a.m.
- Hadley's at Airport Road, Carlsbad 8:45 a.m.



SAN DIEGO FLORAL ASSOCIATION
Garden Center and Library - Founded in 1907
 Casa del Prado Room 105 San Diego CA 92101-1619
 619/232-5762

Under the sponsorship of the Park & Recreation Department, City of San Diego, California

GENERAL MEETINGS

1994

April 19,

June 14, October 18

5:45 p.m.

Casa del Prado, Room 101
Balboa Park, San Diego

OFFICERS

President

Carol Robertson

First Vice President

Donald Boyer

Second Vice President

Marianne Truby

Treasurer

Jean E. Johns

Recording Secretary

Ann Waters

Corresponding

Secretary

Alica Weinert

Parliamentarian

Nancy Cottingham

Historian

Barbara Jones

DIRECTORS

Term 1991-1994

Robert Horwitz

Kathy Walsh

Mary Jordan

Term 1992-1995

Paul DeMartini

Johnny Stellini

Term 1993-1996

Dorothy Driscoll

Mary Alice Buasas

Gerry Hoffner

Arrangers Guild

Kathy Walsh

AFFILIATES:

CITY BEAUTIFUL OF SAN DIEGO

Pres: Mrs. Ruth Smith 488-0830
4995 Fanuel Street

San Diego CA 92109-2134

PROFESSIONAL WOMEN'S HORTICULTURE AND LANDSCAPE ASSOCIATION (PWHLA)

Pres: Lucy Warren 295-0342
P. O. Box 3456

San Diego CA 92163-1456

2nd Tue - Sep/Nov/Feb/Apr

6:30 pm, Casa del Prado

QUAIL BOTANICAL GARDENS FOUNDATION, INC

Pres: Caroline Stabile 436-3036
P. O. Box 230005

Encinitas CA 92023-0005

SAN DIEGO ARTISTIC PLANT/LANDSCAPE

Vice Pres: Jeff Wilder 566-5834
10884 Worthington Avenue

San Diego CA 92126-2219

3rd Sat - 9:00 am-12:00 pm

Casa del Prado, Room 104

SAN DIEGO BOTANICAL GARDEN FOUNDATION

Press: Harold S. Berg 466-1445
2320 Lawton Drive

Lemon Grove CA 91945-3337

SOUTHWESTERN JUDGES COUNCIL

Chr: Barbara Stevens 940-0902
33 Via Larga Vista

Bonsall CA 92003

1st Wed - 10:00 am, Casa del Prado

THE BOTANIC GARDEN OF SAN DIEGO

Pres: Rudy Cesena

11410 Caminito Armita

San Diego CA 92131-2125

GARDEN CLUBS:

BERNARD GARDENER'S CLUB

Mrs. Maxine Schimmel 451-3482
18193 Calle Estepona

San Diego CA 92128-1580

3rd Thu - 1:30 pm, Joslyn Senior Center,

Rancho Bernardo

BONITA VALLEY GARDEN CLUB

Pres: Mrs. Lillian Castagna 267-6808
5240 Margaret Drive

Bonita CA 91902-2108

2nd Wed - 9:30 am, Rohr Park Manor,

Sweetwater Road

BRIDGE AND BAY GARDEN CLUB

Pres: Toni Hoppe 435-5669
741 Cabrillo Avenue

Coronado CA 92118-2915

CHULA VISTA GARDEN CLUB

Pres: Mrs. Amos Cargal (Bea) 422-8970
267 Oxford Street

Chula Vista CA 91911-3352

3rd Wed - 1:00 pm, Rohr Park Manor, Bonita

CONVAIR GARDEN CLUB

Pres: Virginia Soderberg 582-7098
6197 Arno Drive

San Diego CA 92120-4628

1st Wed - 7:00 pm, Recreation Club House

CORONADO FLORAL ASSOCIATION

Pres: Mrs. Pat Starr 435-3849
966 I Avenue

Coronado CA 92118-2450

CROWN GARDEN CLUB

Pres: Mrs. John M. Andersen 435-9041
952 I Avenue

Coronado CA 92118-2450

DOS VALLES GARDEN CLUB

Pres: Betty Gilliam 749-0039
P. O. Box 123

Valley Center CA 92082-0123

2nd Tue - 12:30 pm, Valley Center Com. Hall

ESCONDIDO GARDEN CLUB

Pres: Marty Peterson 743-3832
1140 Conway Drive

Escondido CA 92027-1467

FALLBROOK GARDEN CLUB

Pres: Mr. Wilford Gower 723-7164
913 Ridge Heights

Fallbrook CA 92028-4022

FLEURS DE LEAGUE GARDEN CLUB

Chrm: Mrs. Electra Black 454-7575
2469 Avenida de la Playa

La Jolla CA 92037-3204

2nd Mon - 10:30 am, Home of Members

GROSSMONT GARDEN CLUB

Pres: Mrs. Dolores Smith 464-2457
7443 Orien Avenue

La Mesa CA 91941-7730

2nd Mon - 9:30 am, 4975 Memorial Drive,

La Mesa

LA JOLLA GARDEN CLUB

Pres: Marcia Wilcox 488-6467
653 Carla Way

La Jolla CA 92037-8013

3rd Tue - 1:30 pm, L.J.Lutheran Church

LAKESIDE GARDEN CLUB

Pres: Mrs. Esther Schmidt 561-0867
15614 Hawley Court

El Cajon CA 92021-2534

3rd Mon - 7:30 pm, Olde Community Church,

Maine Avenue, Lakeside

LAS JARDINERAS

Pres: Mrs. Gretchen Allen 222-3643
356 San Gorgonio Street

San Diego CA 92106-3342

3rd Mon - 10:30 am, Home of Members

MIRACOSTA HORTICULTURE CLUB

Pres: Mrs. Raymond Amos 724-3136
508 Hutchison Street

Vista, CA 92084-1408

3rd Sat - 1:00 pm, Miracosta Community

College, Horticulture Building #78

CLUB AND PROFESSIONAL AFFILIATES (CONTINUED)

PACIFIC BEACH GARDEN CLUB Pres: Mrs. Dale S. Munda 1544 Oliver Avenue San Diego CA 92109-5321 2nd Mon - 1:00 pm, Recreation Center	272-9727	OHARA SCHOOL OF IKEBANA SAN DIEGO CHAPTER Pres: Mrs. Walter Bourland 2936 Havasupai Avenue San Diego CA 92117-1641	276-4667	CACTUS & SUCCULENT PALOMAR CACTUS AND SUCCULENT SOCIETY Pres: Eleanore Hewitt P. O. Box 840 Escondido CA 92033-0840	753-3651
PALOMAR DISTRICT CALIFORNIA GARDEN CLUBS, INC. Dir: Mrs. L.L. Cottingham (Nancy) 222-4616 735 Cordova Street San Diego CA 92107-4257		SOGETSU SCHOOL OF IKEBANA SAN DIEGO BRANCH Pres: Mrs. Leroy Lahey 2829 Flax Drive San Diego CA 92154-2160	429-6198	SAN DIEGO CACTUS AND SUCCULENT SOCIETY Pres: Mr. Joseph Betzler P. O. Box 33181 San Diego CA 92163-3181 2nd Sat - 1:00 pm, Casa del Prado	239-0804
POINT LOMA GARDEN CLUB Pres: Mrs. W. Cross (Marilyn) 226-6441 851 Cordova Street San Diego CA 92107-4252 2nd Wed - 10:00 am, Westminster Presby Church		PLANT SOCIETIES: AFRICAN VIOLETS BALBOA PARK AFRICAN VIOLET SOCIETY Pres: Mr. Leonard C. King 298-3754 3327 28th Street San Diego CA 92104-4524		CAMELLIA SAN DIEGO CAMELLIA SOCIETY Pres: Mrs. Ruth Sheldon 972 Wakefield Court El Cajon CA 92020-2094 3rd Wed - 7:30 pm, Casa del Prado	464-1971
POWAY VALLEY GARDEN CLUB Pres: Maxine Tudor 451-1064 P. O. Box 27 Poway CA 92064-5259		4th Mon - 7:30 pm, Casa del Prado HEARTLAND AFRICAN VIOLET SOCIETY Pres: Pat Akers 579-1975 219 Loma Vista Place El Cajon CA 92021-4235 3rd Tue - 7:00 pm, Wells Park Ctr, El Cajon		DAHLIA SAN DIEGO COUNTY DAHLIA SOCIETY Pres: Gerald Lohmann 6616 Rockglen Avenue San Diego CA 92111-4108 4th Tue - 7:30 pm, Casa del Prado	279-5135
RANCHO SANTA FE GARDEN CLUB Pres: Mr. Harold Sexton Hort Chrm: Mrs. Shirley Arms P. O. Box 483 Rancho Santa Fe CA 92067-0483 2nd Tue - 7:30 pm, Garden Club		SAN DIEGO DAYTIME AFRICAN VIOLET SOCIETY Pres: Mrs. Toni Baker 582-7516 6475 50th Street San Diego CA 92120-2709 2nd Mon - 1:00 pm, Christ United Methodist Church		EPIPHYLLUM SAN DIEGO EPIPHYLLUM SOCIETY Pres: Mrs. Margaret Pethley 14426 Calle Nublado San Diego CA 92129-3811 2nd Wed - 7:30 pm, Casa del Prado	484-4189
SAN CARLOS GARDEN CLUB Pres: Mrs. Art Kuehn 582-0230 5110 Leicester Way San Diego CA 92120-1242 4th Tue - 9:30 am, Home of Members		BAMBOO SOUTHERN CALIFORNIA CHAPTER AMERICAN BAMBOO SOCIETY Sec: George Shor 453-0334 2655 Ellentown Road La Jolla, CA 92037-1147		FERN SAN DIEGO FERN SOCIETY Pres: Robin Halley 1418 Park Row La Jolla CA 92037-3710 3rd Thu - 7:30 pm, Casa del Prado	454-2234
SAN DIEGUITO GARDEN CLUB Pres: Mrs. Grant S. Baze 756-3443 P. O. Box 541 Rancho Santa Fe CA 92067-0541 4th Wed - 9:30 am, Quail Bot. Gardens		BEGONIA ALFRED D. ROBINSON BRANCH AMERICAN BEGONIA SOCIETY Pres: Mrs. Crystal Zook 226-6667 526 San Elijo Street San Diego CA 92106-3448		FRUIT CALIFORNIA RARE FRUIT GROWERS Pres: Mrs. Claire Guggenheim 9914 Paseo Montalban San Diego CA 92129-2752	484-6490
SCRIPPS MESA GARDEN CLUB Pres: Cindy Drake 271-8933 9842 Hibert Street #276 San Diego CA 92131-1096 4th Mon - 6:00 pm, Scripps Ranch Library		2nd Tue - 10:30 am, Home of Members PALOMAR BRANCH AMERICAN BEGONIA SOCIETY Pres: Eleanor Calkins 746-4743 910 Fern Street Escondido CA 92027-1708		FUCHSIA & SHADE PLANTS SAN DIEGO FUCHSIA AND SHADE PLANT SOCIETY Pres: Paul Taylor 1298 Raven Avenue Chula Vista CA 91911-3814 2nd Mon - 7:30 pm, Casa del Prado	656-0632
THE VILLAGE GARDEN CLUB OF LA JOLLA Pres: Mrs. W. Keith Garrick (Pat) 287-0282 6252 Lance Place San Diego CA 92120-7313 4th Thu - 1:00 pm, United Methodist Church		SAN MIGUEL BRANCH AMERICAN BEGONIA SOCIETY Pres: Mrs. T.M. O'Reilly (Thelma) 670-0830 10942 Sunray Place La Mesa CA 91941-7241 Last Sat - 10:30 am, Home of Members		GERANIUM SAN DIEGO GERANIUM SOCIETY Pres: Mrs. Gladys Ford 5942 Alta Mesa Way San Diego CA 92115-6102 2nd Tue - 7:30 pm, Casa del Prado	286-3976
THE VISTA GARDEN CLUB Pres: Mr. William Winters 727-5505 3030 Winters Hill Vista CA 92084-6570 1st Fri - 12:00 pm, Vista Senior Center		BONSAI SAN DIEGO BONSAI CLUB, INC. Pres: Kora Dalager 222-9835 P. O. Box 40037 San Diego CA 92164-0037		HEMEROCALLIS SOUTHWEST HEMEROCALLIS SOCIETY Pres: Ms. D. D. Herman-Walker 263-5324 P. O. Box 131286 San Diego CA 92170-1286 1st Sat - 10:00 am, Quail Gardens	
IKEBANA SCHOOLS ICHIYO SCHOOL OF IKEBANA SAN DIEGO CHAPTER Pres: Haruko Crawford 660-2046 10411 San Carlos Drive Spring Valley CA 91978-1034		2nd Sun - 1:00 pm, Casa del Prado BROMELIAD BROMELIAD STUDY GROUP OF BALBOA PARK Pres: Stephen Johnson 484-5948 13368 Darview Lane San Diego CA 92129-2388		HERB THE S. D. COUNTY HERB SOCIETY Pres: Kathleen Delancey 3502 Lomas Serenes Drive Escondido CA 92020-7907	746-5038
IKEBANA INTERNATIONAL CHAPTER 119 Pres: Oleta Stevens 723-9490 949 Riverview Drive Fallbrook CA 92028-1845 4th Wed - 10:00 am, Casa del Prado		2nd Sun - 1:00 pm, Casa del Prado BROMELIAD SAN DIEGO BROMELIAD SOCIETY Pres: Gayle Ver Steeg 488-1661 1421 Yost Drive San Diego CA 92109 4th Wed - 7:30 pm, Casa del Prado		THE HERB CLUB Pres: Judy Dunning 15255 Lyons Valley Road Jamul CA 91935-3416 3rd Thu - 7:30 pm, Call for location	669-0222
IKENOBO CHAPTER OF SAN DIEGO Pres: Mrs. Charles Oehler 278-5689 2822 Walker Drive San Diego CA 92123-3056					
OHARA SCHOOL OF IKEBANA LA JOLLA CHAPTER Pres: Connie Davis P. O. Box 500765 San Diego CA 92150-0765 2nd Tues - 10:00 am	672-0128				

CLUB AND PROFESSIONAL AFFILIATES (CONTINUED)

HOYA		TREES
SAN DIEGO HOYA GROUP c/o: Harriette Schapiro 5217 Cassandra Lane San Diego CA 92109-1314 North County	273-4267	PEOPLE FOR TREES Pres: Curt Lutz 932 H Avenue Coronado CA 92118-2524
IRIS		224-4423
SAN DIEGO/IMPERIAL COUNTIES IRIS SOCIETY Pres: Mr. Walter McNeel 4486 Ute Drive San Diego CA 92117-5855 2nd Sat - 10:00 am Casa de las Campanas, RB	432-8640	WATER GARDEN SOUTHERN CALIFORNIA WATER GARDEN SOCIETY Contact: Walter Pagels 6073 Lancaster Drive San Diego CA 92120-4536
IVY		582-5408
THE AMERICAN IVY SOCIETY SAN DIEGO CHAPTER Pres: Johnny Stellini 2775 A Street #C San Diego, CA 92102-1043 1st Mon - Casa del Prado	483-5144	PROFESSIONAL AFFILIATES: CLASSIC GARDENS P. O. Box 2711 La Jolla CA 92038-2711
NATIVE PLANTS		459-0316
CALIFORNIA NATIVE PLANT SOCIETY SAN DIEGO CHAPTER Pres: Bertha McKinley P. O. Box 1390 San Diego, CA 92112 3rd Tue - 7:30 pm, Casa del Prado	270-9573	MASTER LANDSCAPE SERVICES, INC. Robert Mayberry/Gary Rodriguez 3089C Clairemont Drive #296 San Diego CA 92117-6802
LAKE HODGES NATIVE PLANT CLUB Pres: Donna Zimmer 1428 Via Valente Escondido, CA 92029 4th Mon - 2:00 pm - Home Fed Bank, RB	480-4750	AFFILIATES: Send changes to: Lynn Beyerle, Affiliates Editor <i>California Garden</i> , Casa del Prado, Room 105, Balboa Park, San Diego CA 92101-1619. Call 232-5762. Deadline for May-Jun issue: Mar 15, 1994.
SDFA TOUR		
SATURDAY, May 7, 1994		SATURDAY, MAY 7, 1994
SPECTACULAR PRIVATE GARDENS		SPECTACULAR PRIVATE GARDENS
We are invited to visit two of the loveliest private gardens in North County. Our day begins in Rancho Santa Fe, where an almost new garden has been coaxed into incredible bloom by a talented, gentle lady, Agatha Youngblood.		<i>Lunch is included</i>
Our hostess has not yet selected a name for her garden, but she thinks of it as a cottage-style endeavor with a definite California flavor. You'll probably think of it as a paradise. Clearly, no one will be anxious to leave, so we'll tempt you away with a pleasant lunch (included).		<input type="checkbox"/> \$40.00 Members (who pay dues to SDFA)
Our second invitation comes from Dr. Robert Graham in Escondido. The good doctor has lavished his time, talent and attention on his ten acres, aptly named Shadybrook. A natural stream bisects his property and runs amid those huge live oaks—some centuries old—that provide the shade.		<input type="checkbox"/> \$43.00 Non-Members, Members of Affiliates
Flowers bloom everywhere in a profusion of colors. This is a well-established garden, where years of care and thoughtful planting have been combined. The result is a tasteful and intelligent enhancement of a natural beauty spot.		Make checks payable to San Diego Floral Association Mail to SDFA, Casa del Prado Balboa Park, San Diego, CA 92101-1619

SATURDAY, MAY 7, 1994
SPECTACULAR PRIVATE GARDENS
Lunch is included

- \$40.00 Members (who pay dues to SDFA)
- \$43.00 Non-Members, Members of Affiliates

Make checks payable to San Diego Floral Association
Mail to SDFA, Casa del Prado
Balboa Park, San Diego, CA 92101-1619

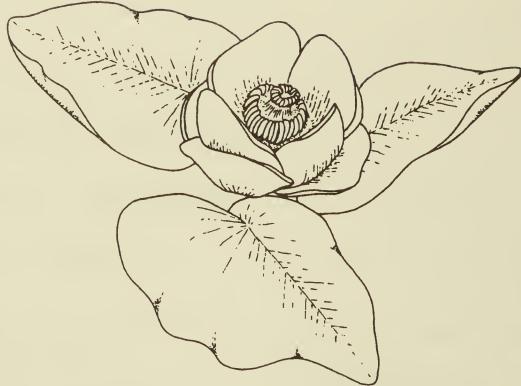
Please include a stamped/addressed envelope

Name/Phone:

Address:

PICK-UPS

- Red Lobster Park and Ride Grossmont Center, La Mesa 8:30 a.m.
- Fashion Valley SW corner near Penney's 9:00 a.m.



This lily flourishes in the pond at Rancho Santa Ana Botanic Garden, eighty-five acres devoted entirely to native California plants. Tours are available, telephone (909)625-8767. Drawing from *Floral Portraits of California from Rancho Santa Ana Botanic Garden*, text by B. E. Busenberg, drawings by Lois Martin, reprinted by permission. The book is available for \$3.95, to be found with other educational materials, plants, and gifts at the shop at the Garden, at 1500 North College, Claremont, CA 91711.

One may also see this pond lily at the Santa Rosa Plateau Ecological Reserve. The 6,925 acres of the Reserve are located in an area between Temecula and Murrieta. It is managed jointly by The Nature

NUPHAR POLYSEPALUM Cow Lily Yellow Pond Lily

The leaves and flowers of this handsome plant float on the surface of quiet ponds and marshes above a long stem that stretches from a stout, creeping rootstock buried in the mud below.

At this time there are Saturdays and Sundays, call (909)677-6951 for information. The Reserve, at 22115 Tenaja Road, Murrieta 92562, is open sunrise to sunset. No collecting of plants is allowed. □

by Jacqueline Coleman

"BABY LETTUCE"

USDA researchers have come to the rescue of those who are tired of having to throw away leftover lettuce from too-large heads. New cultivars are $\frac{1}{2}$ to $\frac{1}{2}$ the size of their parent, 'Salinas', a crisphead lettuce.

Thanks to a donation of seeds from Genecorp some of our members are growing these new types: 'Ice Cube', 'Blush', and 'Mini-green'. Since this magazine went to press too early in the season, we have no reports as yet. However, we wanted you to have the opportunity to order seeds in a timely manner. Other trial reports say that these lettuces have a dark-green color which extends close to the core. 'Blush' has a tinge of red on outer leaves. No claims are made for unusual disease resistance. Trials in the East showed that the plants could withstand temperatures of 86 to 90 degrees F during final weeks of growth "without substantial loss in heading."

Possibly we will not soon see these lettuces in supermarkets as they require new configuration of fields, new tractor settings, and additional manual labor.

We are aware of two seed sources: Pybas Vegetable Seed Co., P. O. Box 868, Santa Maria, CA 93456-0868 and Genecorp, Inc., 124-A Griffin Street, Salinas, CA 93901-3720, Attention: S. Ernst

Genecorp's price is \$13.50 for one ounce (approximately 1,000 seed pills) shipping included. Pybas charges \$13.00 for the same. □

by Jacqueline Coleman

CORRECTION

The January/February 1994 issue, page 5, top of second column in "Color Control in the Garden" should read, "speak in terms of 'hot' and 'cold' colors. Yellow, orange, apricot/salmon, and many shades of red are hot colors. Purples, blues, pure green, and most shades of pink are cool colors. White is neutral."

* In Harmony *

Herbs & Spices

4808 SANTA MONICA AVE.
OCEAN BEACH, CA (619) 223 - 8051

♦ Beautiful, Handmade ♦
Rose Necklaces & Wreaths

♦ ESSENTIAL & FRAGRANCE OILS ♦

Bulk Botanicals
Teas & Culinary Herbs

Wildflower, Herb & Vegetable Seeds
Native Plant Resource

Open Monday - Friday 10:30 - 6:00
Saturday 10:30 - 5:00

☆ Mail order catalog available ☆



Why is LAURA'S GARDEN Nursery Unique...
We carry plants suitable to our Mediterranean
Climate.

Extensive research is done to locate
the rare & unusual
from all over the world.

All our plants are easily grown, flower prolifically
or have outstanding foliage.

Display Gardens on premise to give you
the opportunity to see

LAURA'S GARDEN

in bloom
in Valley Center
BY APPOINTMENT ONLY
(619) 749-8624



YOU'RE INVITED TO OUR

5TH ANNUAL OPEN GARDEN

& UNUSUAL PLANT SALE
LIMITED QUANTITIES

More than 3/4 acre of plants from
around the world,
many unusual and rare varieties.

Theme gardens --
Woodland/perennial, Tropical,
and Water Thrifty.



WHEN - Sat & Sun, March 19-20
& Sat & Sun, March 26-27
9:00am - 4:00pm

WHERE - 8939 Highfield Ave
La Mesa, CA 91941

specific directions call 338-4451

PRESENTED BY HORTICULTURISTS:

MARC BELL 296-0100
owner - Botanical Design
Innovative Interior & Exterior
Plantscaping

KOBY HALL 338-4451
owner - Koby's Garden Alchemy
Artistic, Detail Work & Design



CALIFORNIA PUBLIC GARDENS:

A Visitor's Guide

by Eric Sigg



The only book covering the entire state, *California Public Gardens* guides you through nearly 150 gardens in twelve geographic and climatic regions of California.

Addresses, phone numbers, garden hours, and admission fees follow each entry.

Maps and color and black and white photographs accompany commentary on horticultural and architectural features, as well as the history and fine art of the gardens.

Available in book stores, or for immediate delivery send \$18.50 (tax & handling included) to:

Golden State Garden Books
17908 Villamoura Drive, Poway, CA 92064

You are Invited to Subscribe to ...

California GARDEN

The PERFECT gift to a friend, relative or neighbor!

1 Year Subscription	\$7.00
2 Year Subscription	\$13.00

or become a Member of -
SAN DIEGO FLORAL ASSOCIATION
MEMBERSHIP \$10.00

(Includes magazine, newsletter, botanical library,
and member discounts to events, trips and classes)

(Please PRINT)

Name _____

Address _____

City _____ State _____ ZIP _____

Phone (_____) _____

San Diego Floral Association
Casa del Prado, Balboa Park, San Diego, CA 92101-1619
(Add \$6.00 per year for postage to foreign destinations)



WALTER ANDERSEN NURSERY

OPEN 7 DAYS
A WEEK

3642 Enterprise Street
San Diego, CA 92110
(619) 224-8271

8:00 A.M. TO
5:00 P.M.

FREE GARDEN CLASSES
9:00 A.M. SATURDAY MORNINGS

Antonelli Brothers

TUBEROUS BEGONIAS
2545 Capitola Road
Santa Cruz, California 95062

18-page Catalog \$1.00

ALL THINGS HERBAL

El Cajon, California
(619) 440-6159

If you are interested in learning how to grow & use herbs, classes forming monthly include:

- CULINARY USES OF HERBS
- GROWING HERBS
- HERB DESIGN FOR GARDENS & LANDSCAPING
- MAKING HERBAL TEAS, JELLIES & VINEGARS
- WREATH MAKING WITH HERBS

Cost is \$50.00 for three classes, or \$20.00 each class and includes written material, as well as an informal Herbal Tea at the close of class.

Classes are taught by Connie Smith. Her credentials include Ornamental Horticulture study at Cuyamaca College, as well as independent herbal study, and an intense interest in all things herbal!

Personal herbal garden planning and design are also available.

For class schedules and more information,
please call Connie at (619) 440-6159.

So, maybe your gardener or garden are a little disappointing?

Wait! don't get rid of them -

- just have a knowledgeable horticulturist come in with supplemental artistic, detail work or planning.

KOBY'S GARDEN ALCHEMY

CONSULTATION, DESIGN, ARTISTIC/DETAIL WORK, MAINTENANCE

- ❖ Knowledgeable pruning
- ❖ Irrigation
- ❖ Mulch
- ❖ Proper use of fertilizers
- ❖ Guidance
- ❖ Troubleshooting
- ❖ Reviving worn gardens
- ❖ Theme gardens
- ❖ Unusual / remarkable
- ❖ And more...



"Remember, the difference between good and great
is attention to detail."

Koby W. Hall -

KOBY'S GARDEN ALCHEMY
(an artistic/detail oriented company)

698 RAYMOND STREET / EL CAJON, CA 92020-6436 (619)338-4451





*San Marcos, California
2600 Sarver Lane
(619)744-0600*

Azalea Trees in Many Sizes Sarver Nursery Company Azaleas and Cannas Our Specialty

Rosalind E. Sarver
Owner

P. O. Box 905
San Marcos, CA 92079



Geraniums

100's of different *Pelargoniums*,
over 20 different *Geraniums*,
including 'Johnson's Blue'

100's of succulents, over 25 ferns, and lots of
patio plants that do well in containers

New Leaf Nurseries

2456 Foothill Drive • Vista, CA 92084-5809
Call for hours & directions (619) 726-9269

DAYLILIES OF TOMORROW



featuring
our own new hybrids

Visit one of the finest Daylily
collections in Southern California

CREATE YOUR OWN TROPICAL LOOKING GARDEN

Ease care, full range of color. Blooms May thru December.
(can also be grown in containers)

DON & MARY HARDGROVE

1656 N. Second St. (between Greenfield & Pepper Dr.) El Cajon • 447-4922
Open Tuesday-Sunday • 10 am-5 pm



SOUTHERN CALIFORNIA WATER GARDEN SOCIETY Meeting

Sunday, April 17, 1994 at 1:00P.M.
Refreshments and Water Gardens to View
call for location, (619)582-5408,
(619)263-9965 or in LA area (714)497-4022

NATIVE PLANTS

For Money Saving San Diego Landscaping



The best in botanical materials,
perfect for Southern California's
scarce water environment. We
also have 100s of exotic plants:
bonsai, vines, new hybrids,
dwarfs, Mediterranean,
Australian, tropical and
sub-tropical plants in a full
range of sizes and colors.

We're San Diego's
Rare Plant Horticulturists

*Visit our nursery weekdays 9 a.m. - 4 p.m.
2565 Cactus Road on Otay Mesa*

Pacific Southwest Nursery • (619) 477-5333

**Statement of Ownership,
Management and
Circulation
(Required by 29 U.S.C. 3686)**

1A. Title of Publication
CALIFORNIA GARDEN

1B. Frequency of Issue
Bimonthly

1C. Complete Mailing Address of Known Office of Publication (City, State and Zip + 4 Code) (Not printed)
Casa del Prado, Balboa Park, San Diego, CA 92101-1619

1D. Complete Mailing Address of Headquarters of General Business Office of the Publisher (Not printed)
Casa del Prado, Balboa Park, San Diego CA 92101-1619

1E. Full Names and Complete Mailing Address of Publisher, Editor, and Managing Editor (This item MUST NOT be blank)
PACIFIC FLORAL ASSOCIATION, Casa del Prado, Balboa Park, San Diego CA 92101-1619

Editor Name and Complete Mailing Address
Jacqueline Colleen

Managing Editor Name and Complete Mailing Address
(none)

2. Owner (If owned by a corporation, its name and address must be given and also immediately thereafter the names and addresses of stockholders owning 1 percent or more of total amount of stock. If owned by a trustee, the name and address of the person or persons holding title in trust, and if known, the name and address of the person or persons for whom the trust is held. If owned by a partnership, the names and addresses of partners and their interest in the partnership must be given. If owned by an individual, his or her name and address must be given.)

Full Name
PACIFIC FLORAL ASSOCIATION, Inc., Casa del Prado, Balboa Park, San Diego CA 92101-1619

Complete Mailing Address
(none)

3. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages or Other Securities (If none, so state)
Full Name
(none)

Complete Mailing Address
(none)

4. Branch Binderies, Mergers, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages or Other Securities (If none, so state)
Full Name
(none)

Complete Mailing Address
(none)

5. For Completion by Nonprofit Organizations Authorized To Mail as Second Class Mail
The name, address, telephone number, and mailing status of this publication for Federal Income Tax purposes (Check, inc.)

(1) Not Chartered
 Chartered
 Proceeding 12 Month

(2) Chartered
 Proceeding 12 Month
(If chartered, publish your name explaining of change with this statement.)

6. Export and Other Mailing Status
Average No. Copies Each Issue During Last 12 Months
Actual No. Copies Each Issue During Last 12 Months

A. Total No. Copies Per Issue
2596 **2530**

B. Paid and/or Received Copy
25

C. Sales Through Dealers
123

D. Paid Order Imposed
2112 **2134**

E. Total Paid Under Rate Agreement
2225 **2159**

F. Free Distribution by Mail, Carrier or Other Means
66 **65**

G. Total Distribution (Sum of C-E)
2301 **2224**

H. Capital Outlay
295 **306**

I. Return from News Agents
00 **00**

J. TOTAL (Sum of G-F and C-E) paid out per issue on sheet in A
2596 **2530**

K. I certify that the statements made by me above are correct and complete
Jacqueline Colleen, editor

Signature and Title of Editor, Publisher, Business Manager, or Owner
(or signature on behalf)

PC Form 3526, January 1991

CALIFORNIA GARDEN (USPS 084-240)
San Diego Floral Association, Inc.
Casa del Prado, Balboa Park
San Diego, CA 92101-1619, USA

SECOND CLASS POSTAGE

I-1997 Sustain-6

KALEIDOSCOPE OF ORCHIDS

THE 48TH ANNUAL

ORCHID SHOW

& PLANT SALE



Experience the captivating beauty of one of nature's most precious jewels, the orchid, during San Diego's oldest and largest Orchid Show and Plant Sale, March 18-20, 1994. Be a part of the wonder and intrigue of "Kaleidoscope of Orchids." Rare and exotic orchids will provide a magnificent display of color and fantasy in the heart of America's Finest City.

Free Orchid Culture Classes on Saturday and Sunday.

Show Schedule: Friday, March 18, 6 pm-10 pm • Saturday, March 19, 9 am-6 pm • Sunday, March 20, 9 am-4 pm
Admission: \$4.00 at the door, \$3.00 advance tickets, children under 12 free

Scottish Rite Memorial Center

1895 Camino Del Rio South • San Diego, California • For Information, Call (619) 232-5762

SAN DIEGO COUNTY ORCHID SOCIETY